

## PERSONAL INFORMATION

## Valentina Bruno

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Date and place of birth 15/04/1986, Palermo | Nationality Italian



## EDUCATION AND TRAINING

- 2005 High School Diploma ("Liceo Classico N. Turriziani", Frosinone)
- 2010 Erasmus project: Clinical Stage at the "Centre Hospitalier Régional Universitaire de Lille, Université de Lille 2 Droit et Santé, Lille, France"
- 21/07/2011 Master Degree in Medicine and Surgery, "Tor Vergata" University, Rome - score: 110/110 cum laude – Theses defended "Recurrent pregnancy loss: Role of thrombophilic and immunomodulators factors and efficacy of heparin therapy"
- 2<sup>nd</sup> Session, Accademic year 2011 Medical License to practice, "Tor Vergata" University, Rome - score: 269/270
- 2012-2013 Leonardo da Vinci Project (Your Job in Europe) - Department of Clinical and Experimental Medicine (IKE), Autoimmunity and Immune Regulation (AIR), Clinical Immunology, Faculty of Health Sciences, Linköping University, Sweden
- 12/2012-02/2013 Financed Research Preparative Fellowship at the Department of Clinical and Experimental Medicine awarded in the field "Reproductive Immunology" entitled "Immune modulating roles of heparin in vitro" - Department of Clinical and Experimental Medicine (IKE), Autoimmunity and Immune Regulation (AIR), Clinical Immunology, Faculty of Health Sciences, Linköping University, Sweden
- 2013-2018 Residency Program in Obstetrics and Gynecology, "Tor Vergata" University, Rome
- 2017/2018 DIU Echographie gynécologique et obstétricale Class, Université Paris Descartes, Paris, France Gynecologic ultrasound exam: score 20/20.
- 08/08/2018 Diploma achieved as a Specialist in Obs/Gyn, Faculty of Medicine and Surgery - Tor Vergata University, Rome - score: 50/50 cum laude; These defended: "Immunological aspects in Recurrent Pregnancy Loss".
- 2020 PhD in Reproductive Immunology; AIR (Autoimmunitet & ImmuneReglering) Unit of Autoimmunity and Immune Regulation, Reproductive Immunology, Department of Clinical and Experimental Medicine, IKE, Faculty of Health Sciences, Linköping University, Sweden; These defended: "Clinical and Immunological Aspects on Recurrent Pregnancy Loss".
- 2021 PhD in Medical-Surgical Biothecnologies and Translational Medicine, Tor Vergata University, Rome; These defended: "From fetal-maternal immune tolerance to immune escape in gynecological cancers: potential immune therapy targets in endometrial cancer with focus on LOX-1 / NALP3 pathway"; score: excellent cum laude.

## PROFESSIONAL EXPERIENCE

Since 11/2018 Gynecologist Oncologist at the IRCCS National Cancer Institute "Regina Elena"- IFO, Rome, Italy

## TECHNICAL SKILLS AND COMPETENCES

MOTHER TONGUE Italian

## OTHER LANGUAGES

	COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
	Ascolto	Lettura	Interazione	Produzione orale	
English	C2	C2	C2	C2	C2
English Language Certificate: Advanced level -Common European Framework: Level C2 English Courses in London, Dublin, Edinburgh and Brighton.					
French	B2	B2	B2	B2	B2
French Language Certificate: Delf - Niveau B2					

## INFORMATIC SKILLS

- High school: "PNI-Piano Nazionale Informatica" study program (Informatics National Plan Study program in the High School - five years)
- MS office (Excel/Outlook/PowerPoint/Word), Graph Pad Prism and SPSS statistical software, Kaluza, Mendeley citations software

## SKILLS ACQUIRED IN "LABORATORY TECHNIQUES FOR RESEARCH"

Expertise and autonomy in the laboratory methods of basic research in the field of immunology, applied to reproduction, with particular focus on the isolation of cell lines and cell cultures (macrophages, T lymphocytes, trophoblastic cell line HTR-8, placenta explants, trophoblastic cells from chorionic villus cultures, cell lines from endometrial biopsies), immunophenotyping, fluorocytometry, functional immunological studies, ELISA and Luminex.

## RESEARCH ACTIVITY

**LINES OF RESEARCH IN GYNECOLOGY AND OBSTETRICS**

**Obstetrics:** immunological aspects of Pregnancy and Recurrent Pregnancy Loss.

**Gynecology:** from immune tolerance of the maternal-fetal interface to immune escape in endometrial cancer, immunologic pathways in the risk of recurrence of gynecologic neoplastic diseases, Mini-Invasive Surgery (MIS) in gynecologic cancers.

**1. Plasminogen activator inhibitor-1, factor V, factor II and methylenetetrahydrofolate reductase polymorphisms in women with recurrent miscarriage.**

Pietropolli A, Giuliani E, **Bruno V**, Patrizi L, Piccione E, Ticconi C.  
J Obstet Gynaecol. 2014 Jan 31

**2. Human IgG Antinuclear Antibodies Induce Pregnancy Loss in Mice by Increasing Immune Complex Deposition in Placental Tissue: In Vivo Study.**

Veglia M, D'Ippolito S, Marana R, Di Nicuolo F, Castellani R, **Bruno V**, Fiorelli A, Ria F, Maulucci G, De Spirito M, Migliara G, Scambia G, Di Simone N.  
Am J Reprod Immunol. 2015 Dec;74(6):542-52.

**3. Uterine blood flow indices, antinuclear autoantibodies and unexplained recurrent miscarriage.**

Pietropolli A, **Bruno V**, Capogna MV, Bernardini S, Piccione E, Ticconi C.  
Obstet Gynecol Sci. 2015 Nov;58(6):453-60.

**4. Three-hour analysis of non-invasive foetal sex determination: application of Plexor chemistry.**

Pietropolli A, Capogna MV, Cascella R, Germani C, **Bruno V**, Strafella C, Sarta S, Ticconi C, Marmo G, Gallaro S, Longo G, Marsella LT, Novelli A, Novelli G, Piccione E and Giardina E.  
Human Genomics, (2016) 10:9

**5. Antinuclear autoantibodies and pregnancy outcome in women with unexplained recurrent miscarriage.**

Ticconi C, Pietropolli A, Borelli B, **Bruno V**, Piccione E, Bernardini S, Di Simone N.  
Am J Reprod Immunol. 2016 Sep 12.

**6. OLR1 and Loxin expression in PBMCs of women with a history of unexplained recurrent miscarriage: a pilot study.**

**Bruno V**, \*Rizzacasa B, Pietropolli A, Capogna MV, Massoud R, Ticconi C, Piccione E, Cortese C, Novelli G, Amati F (\*authors equally contributed).  
Genetic Testing and Molecular Biomarkers. Volume 21, Number 6, 2017.

**7. Ectopic pregnancy in women with recurrent miscarriage.**

Ticconi C, Capogna MV, Martelli F, Borelli B, **Bruno V**, Ergasti R, Sorge R, Piccione E, Pietropolli A.  
J Obstet Gynaecol Res. 2018 Feb 14.

**8. Effects of low molecular weight heparin on the polarization and cytokine profile of macrophages and T helper cells in vitro.**

\* **Bruno V**,\* Svensson-Arvelund J, Rubér M, Berg G, Piccione E, Jenmalm MC, Emerudh J.  
Sci Rep. 2018 Mar 8;8(1):4166.

**9. Effect of chorionic villus sampling on placental volume and vascularization in the first trimester of pregnancy.**

**Bruno V**, Martelli F, Capogna MV, Youssef A, Bruno A, Ticconi C, Piccione E, Pietropolli A.  
J Matern Fetal Neonatal Med. 2018 Jul 12:1-11.

**10. What has to be pointed out in unexplained recurrent pregnancy loss research in the unsolved fields: lessons from clinic. An Italian RPL Unit experience.**

**Bruno V**, Ticconi C, Sarta S, Piccione E, Pietropolli A.  
It. J. Gynaecol. Obstet. 2019, 31: N.2

**11. Low molecular- weight-heparin increases Th1- and Th17-associated chemokine levels during pregnancy in women with unexplained recurrent pregnancy loss: a randomised controlled trial.** \*Rasmak

\*Roepke E, **Bruno V**, Nedstrand, E. Boji, R, Strid, CP, Piccione, E, Berg, G, Svensson Arvelund, J, Jenmalm, MC,\* Rubér, M,\* Emerudh, J. (\*These authors equally contributed).  
Scientific Reports, Volume 9, Issue 1, 1 December 2019, Article number 12314

**12. Amniotic fluid antiphospholipid antibodies: potential role in antiphospholipid syndrome independent aberrant implantation process.**

**Bruno V**, Nuccetelli M, Ticconi C, Bruno A, Martelli F, Capogna MV, Bernardini S, Piccione E, Pietropolli A.  
Reprod Biol Endocrinol. 2019 Oct 15;17(1):79.

**13. When two genes do not work properly.**

Corrado G, **Bruno V**, Vizza E.  
Journal of Translational Science. ISSN: 2059-268X (article in press).

**14. Longitudinal Changes of Subpubic Arch Angle throughout Pregnancy.**

Martelli F, Youssef A, Capogna MV, Bruno A, **Bruno V**, Dodaro MG, Ticconi C, Ghi T, Piccione E, Pietropoli A.  
Gynecol Obstet Invest. 2019 Nov 20:1-7.

**15. Uterine and Placental Blood Flow Indexes and Antinuclear Autoantibodies in Unexplained Recurrent Pregnancy Loss: Should They Be Investigated in Pregnancy as Correlated Potential Factors? A Retrospective Study.**

**Bruno V**, Ticconi C, Martelli F, Nuccetelli M, Capogna MV, Sorge R, Piccione E, Pietropoli A.  
BMC Pregnancy and Childbirth volume 20, Article number: 44 (2020).

**16. Endometrial cancer immune escape mechanisms: let's learn from the fetal-maternal interface.**

**Bruno V**, Corrado G, Baci D, Chiofalo B, Carosi MA, Ronchetti L, Piccione E, Albin A, Douglas Mc Clain Noonan, Piaggio G and Vizza E.  
Front Oncol. 2020;10:156.

**17. Pattern of recurrence in patients with endometrial cancer: A retrospective study.**

Vizza E, Cutillo G, **Bruno V**, Sperduti I, Mancini E, Baiocco E, Chiofalo B, Cicchillitti L, Certelli C, Zampa A, Piccione E.  
Eur J Surg Oncol. 2020;46(9):1697-1702.

**18. Palliative Electrochemotherapy in Primary or Recurrent Vulvar Cancer.**

Corrado G, Cutillo G, Fragomeni SM, **Bruno V**, Tagliaferri L, Mancini E, Certelli C, Paris I, Vizza E, Scambia G, Garganese G.  
Int J Gynecol Cancer. 2020;30(7):927-931.

**19. Machine Learning (ML) Based-Method Applied in Recurrent Pregnancy Loss (RPL) Patients Diagnostic Work-Up: A Potential Innovation in Common Clinical Practice.**

**Bruno V**, D'Orazio M, Ticconi C, Abundo P, Riccio S, Martinelli E, Rosato N, Piccione E, Zupi E, Pietropoli A.  
Sci Rep. 2020 May 14;10(1):7970.

**20. Practical recommendations for gynecologic surgery during the COVID-19 pandemic.**

Chiofalo B, Baiocco E, Mancini E, Vocaturo G, Cutillo G, Vincenzoni C, Bruni S, **Bruno V**, Mancari R, Vizza E.  
Int J Gynaecol Obstet. 2020 Aug;150(2):146-150.

**21. First trimester trophoblasts obtained by chorionic villus sampling maintain tolerogenic and proteomic features in successful pregnancies despite a history of unexplained recurrent pregnancy loss.**

**Bruno V**, Lindau R, Jenmalm, MC, Ticconi C, Piccione E, Pietropoli A, Emerudh J  
Am J Reprod Immunol. 2020; 00:e13314.

**22. Lockdown of Breast Cancer Screening for COVID-19: Possible Scenario.**

Vanni G, Pellicciaro M, Materazzo M, **Bruno V**, Oldani C, Pistolese CA, Buonomo C, Caspi J, Gualtieri P, Chiaravalloti A, Palombi L, Piccione E, Buonomo OC.  
In Vivo. 2020;34(5):3047-3053.

**23. Development of new medical treatment for epithelial ovarian cancer recurrence.**

Mancari R, Cutillo G, **Bruno V**, Vincenzoni C, Mancini E, Baiocco E, Bruni S, Vocaturo G, Chiofalo B, Vizza E.  
Gland Surg 2020;9(4):1149-1163

**24. A rare case of vulvar superficial myofibroblastoma associated with ambiguous and unusual differential diagnosis**

Patrizi L, Borelli B, Di Prete M, **Bruno V**, Mauriello A, Piccione E, Ticconi C.  
Gynecologic Oncology Reports. Available online 6 September 2020, In Press.

**25. Case report: Early breast cancer recurrence mimicking bia-alcl in a patient with multiple breast procedures.**

Materazzo M, Vanni G, Pellicciaro M, Anemona L, Servadei F, Giacobbi E, Farinaccio A, Pistolese C.A, Perretta T, Chiochi M, **Bruno V**, Tacconi F  
Frontiers in Surgery, Volume 8, Pages 1 - 62021 Article number 606864.

**26. Comparison Between Laparoscopic and Robotic Surgery in Elderly Patients With Endometrial Cancer: A Retrospective Multicentric Study**

Corrado G, Vizza E, Perrone AM, Mereu L, Cela V, Legge F, Hilaris G, Pasciuto T, D'Indinosante M, La Fera E, Certelli C, **Bruno V**, Kogeorgos S, Fanfani F, De Iaco P, Scambia G, Gallotta V.  
Front Oncol. 2021 Sep 22;11:724886.

**27. Prognostic role of the removed vaginal cuff and its correlation with L1CAM in low-risk endometrial adenocarcinoma**

Vizza E, **Bruno V**, Cutillo G, Mancini E, Sperduti I, Patrizi L, Certelli C, Zampa A, Giannini A, Corrado G.  
Cancers (Basel). 2021 Dec 22;14(1):34.

28. **The giant steps in surgical downsizing toward a personalized treatment of vulvar cancer**  
Giannini A, D'Oria O, Chiofalo B, **Bruno V**, Baiocco E, Mancini E, Mancari R, Vincenzoni C, Cutillo G, Vizza E.  
J Obstet Gynaecol Res. 2022 Mar;48(3):533-540.
29. **Low molecular weight heparin -induced miRNA changes in peripheral blood mononuclear cells in pregnancies with unexplained recurrent pregnancy loss**  
**Bruno V**, Amati F, Ticconi C, Riccio S, Vancheri C, Rizzacasa B, Splendiani E, Ferretti E, Emerudh J, Piccione E, Pietropolli A.  
J Reprod Immunol. 2022 Feb 25;151:103502.
30. **The role of preoperative frailty assessment in patients affected by gynecological cancer: a narrative review**  
Ottavia D'Oria, Tullio Golia D'Auge, Ermelinda Baiocco, Cristina Vincenzoni, Emanuela Mancini, **Valentina Bruno**, Benito Chiofalo, Rosanna Mancari, Riccardo Vizza, Giuseppe Cutillo, Andrea Giannini  
Italian JOG, Vol. 34 (No. 2) 2022 June, 76-83
31. **The giant cell tumor during pregnancy: A review of literature.**  
Formica VM, **Bruno V**, Scotto Di Uccio A, Cocca E, Rossi B, Zoccali C.  
Orthop Traumatol Surg Res. 2022 Sep 7:103396.
32. **Percutaneous-assisted laparoscopy for ovarian tissue cryopreservation: a single-center experience.**  
Chiofalo B, **Bruno V**, Calandra M, Savone D, Mancini E, Baiocco E, Iacobelli M, Giannini A, Vizza E.  
Arch Gynecol Obstet. 2022 Oct;306(4):1329-1335.
33. **Towards reproducible research in recurrent pregnancy loss immunology: Learning from cancer microenvironment deconvolution.**  
Betti M, Vizza E, Piccione E, Pietropolli A, Chiofalo B, Pallocca M, **Bruno V**.  
Front Immunol. 2023 Feb 23;14:1082087.
34. **It is time to implement molecular classification in endometrial cancer.**  
**Bruno V**, Logoteta A, Chiofalo B, Mancini E, Betti M, Fabrizi L, Piccione E, Vizza E  
Arch Gynecol Obstet. 2023 Jul 6. doi: 10.1007/s00404-023-07128-z. Epub ahead of print. PMID: 37410149.
35. **The role of L1CAM as predictor of poor prognosis in stage I endometrial cancer: a systematic review and meta-analysis.**  
Giannini A, D'Oria O, Corrado G, **Bruno V**, Sperduti I, Bogani G, Laganà AS, Chiantera V, Caserta D, Vizza E.  
Arch Gynecol Obstet. 2023 Jul 16.
36. **Beyond Sentinel Lymph Node: Outcomes of Indocyanine Green-Guided Pelvic Lymphadenectomy in Endometrial and Cervical Cancer.**  
Chiofalo B, Laganà AS, Ghezzi F, Certelli C, Casarin J, **Bruno V**, Sperduti I, Chiantera V, Peitsidis P, Vizza E.  
Int J Environ Res Public Health. 2023 Feb 16;20(4):3476.
37. **Outpatient Hysteroscopic Polypectomy-A Retrospective Study Comparing Rigid and Semirigid Office Hysteroscopes.**  
Chiofalo B, Calandra M, **Bruno V**, Tarantino V, Esposito G, Vizza E, Corrado G, Scambia G, Catena U.  
Diagnostics (Basel). 2023 Mar 5;13(5):988.
38. **Potential Protective Role of Pregnancy and Breastfeeding in Delaying Onset Symptoms Related to Multiple Sclerosis.**  
Logoteta A, Piccioni MG, Nistri R, De Giglio L, **Bruno V**, La Torre G, Ianni S, Fabrizi L, Muzii L, Pozzilli C, Ruggieri S.  
Medicina (Kaunas). 2023 Mar 20;59(3):619.
39. **Sexual dysfunctions in breast cancer patients: evidence in context.**  
Vizza R, Capomolla EM, Tosetto L, Corrado G, **Bruno V**, Chiofalo B, Di Lisa FS, Filomeno L, Pizzuti L, Krasniqi E, Sanguineti G, Villa A, Giannini A, Kayal R, Stranges V, Tomao S, Botti C, Tomao F, Barba M, Vizza E, Ciliberto G, Vici P.  
Sex Med Rev. 2023 Jun 27;11(3):179-195.
40. **Urological Complications in Radical Surgery for Cervical Cancer: A Comparative Meta-Analysis before and after LACC Trial.**  
**Bruno V**, Chiofalo B, Logoteta A, Brandolino G, Savone D, Russo M, Sperduti I, Mancini E, Fabrizi L, Anceschi U, Vizza E  
J Clin Med. 2023 Aug 31;12(17):5677.
41. **Machine Learning-based Endometrial Cancer risk prediction model: integrating guidelines of European Society for Medical Oncology with the tumor immune framework.**  
**Valentina Bruno**<sup>^</sup>, Martina Betti<sup>^</sup>, Lorenzo D'Ambrosio<sup>^</sup>, Alice Massacci, Benito Chiofalo, Adalgisa Pietropolli, Giulia Piaggio, Gennaro Ciliberto, Paola Nisticò, Matteo Pallocca<sup>^</sup>, Alessandro Buda<sup>^</sup>, Enrico Vizza<sup>^</sup>  
Int J Gynecol Cancer. 2023 Oct 24;ijgc-2023-004671.

**42. Can the Modified Frailty Index (mFI) Predict Intraoperative and Postoperative Complications in Older Women with Endometrial Cancer Undergoing Laparoscopic or Robotic Surgery? A Multicenter Observational Study.**

Schipa C, Ripa M, Gallotta V, Russo A, Polidori L, Fanfani F, Capomacchia FM, Corrado G, Vizza E, Perrone AM, Mereu L, Cela V, Legge F, Hilaris G, Pasciuto T, D'Indinosante M, La Fera E, Certelli C, **Bruno V**, Kogeorgos S, De Iaco P, Lathouras K, Sollazzi L, Scambia G, Aceto P.  
J Clin Med. 2023 Nov 21;12(23):7205.

**43. It is time to implement molecular classification in endometrial cancer.**

**Bruno V**, Logoteta A, Chiofalo B, Mancini E, Betti M, Fabrizi L, Piccione E, Vizza E.  
Arch Gynecol Obstet. 2024 Mar;309(3):745-753.

**44. Giannini A, D'Oria O, Corrado G, Bruno V, Sperduti I, Bogani G, Laganà AS, Chiantera V, Caserta D, Vizza E.**

The role of L1CAM as predictor of poor prognosis in stage I endometrial cancer: a systematic review and meta-analysis.  
Arch Gynecol Obstet. 2024 Mar;309(3):789-799.

INVITED SPEAKER/FACULTY:

... At international congresses

**SERGS (Society of European Robotic Gynaecological Surgery) 2018:** 10th Annual meeting on Robotic Gynaecological Surgery, "Micrometastasis in SLN's. WHAT DO WE KNOW TODAY", 27th-29th September, 2018, Milan, Italy

**PSOGI (The Peritoneal Surface Oncology Group International) 2019:** International Symposium on advanced Ovarian Cancer, "HOW BIOLOGY AND GENETICS INFLUENCE OC's PROGNOSIS & THERAPY", April 11th - 13th, Atene, Greece

**SERGS (Society of European Robotic Gynaecological Surgery) 2019:** 11th Annual meeting on Robotic Gynaecological Surgery, "Robotic multiport surgery versus single site in obese patients with endometrial cancer" 26th-28th October, 2019, Sofia, Bulgaria

**2022 XIV INTERNATIONAL BIENNIAL MEETING "DANIEL D'ARMENTI"**, "Is it time to implement molecular classification in the management of endometrial cancer?", 26-28 Maggio, Maratea (PZ), Italy

**2023 INTERNATIONAL MEETING** "An Era of Breakthroughs in Gynecologic Oncology: From diagnosis to therapy", "New frontiers in advanced or recurrent gynecological cancer to build personalized therapy"; Verduno (CN) 23-24 May 2023 Auditorium Ferrero Hospital, Italy

... At national congresses

**SIGO (Italian Society of Gynecology and Obstetrics) 2016:** 91st SIGO National Congress, "On the Relationship between Low Molecular Weight Heparin and Spontaneous Polyabortion in Light of the Most Recent Acquisitions," 16-19/10/2016, Rome, Italy

**AGUI (Italian Association of University Gynecologists) 2018:** AGUI Annual Meeting, "Recurrent miscarriage: lessons from the clinic," Rome 2018; June 11-12, 2018, Rome

**SIGO (Italian Society of Gynecology and Obstetrics) 2021:** 96th SIGO National Congress, "TUMOR OF THE OVAIO : Molecular Diagnostics and Predictivity of Reference Markers," DECEMBER 12-15, 2021, SORRENTO (NA), Italy

**SEGI (Italian Society of Gynecologic Endoscopy) 2022:** 16th SEGI NATIONAL CONGRESS, "Modulation of MIS Surgery in Endometrial Carcinoma in Accordance with TCGA Molecular Stratification," Rome June 20-22, 2022, Italy

**SIGO (Italian Society of Gynecology and Obstetrics) 2022:** 97th SIGO CONGRESS, "Endometrial carcinoma: from FIGO staging to biomolecular classification," Milan December 15-18, 2022, Italy

INTERNATIONAL CONGRESS  
ORAL PRESENTATIONS AND  
POSTERS

- Abstract 17th World Congress on Controversies in Obstetrics, Gynecology & Infertility (COGI), November 8-11, 2012, Lisbon, Portugal
  - Ticconi V, Zicari A, Mari M, Bruno V, Rasi V, Piccione E. Effect of Human Chorionic Gonadotropin on High Mobility Group Box-1 (HMGB-1) and Receptors for Advanced Glycation End Products (RAGE) expression in

human endometrium.

2. Placenta; Volume 34, Issue 2 , Pages A1-A94, February 2013 - Abstracts from the V SLIMP - IV LASRI Meeting 2013
  - Ticconi C., Zicari A, Pietropolli A, Bruno V, Rasi V, Piccione E. Low Molecular Weight Heparin (LMWH) in the treatment of Recurrent Miscarriage (RM): A clinical, prospective study on 68 women;
  - Mari E, Brunelli R, Perrone G, Ticconi C, Bruno V, Zicari A. Pro-inflammatory role of leptin in human gestational tissues;
  - Zicari A, Mari E, Ticconi C, Bruno V, Patrizi L, Rasi V, Vizza E, Piccione E. HCG modulates HMGB1 and RAGE expression in normal human endometrium and in endometrial cancer
3. Abstract World Congress on Recurrent Pregnancy Loss, 14-17 January, 2016 – Cannes, France:
  - Oral Presentation:
    - a. Francesca Amati, Barbara Rizzacasa, Valentina Bruno, Paola Borgiani, Maria Vittoria Capogna, Emilio Piccione, Giuseppe Novelli, Adalgisa Pietropolli. OLR1 and Loxin Expression as a Molecular Biomarker of Unexplained Recurrent Miscarriage (uRM). Rome, Italy
    - Posters:
      - b. Carlo Ticconi, Adalgisa Pietropolli, Valentina Bruno, Giovanni Scambia, Emilio Piccione, Nicoletta Di Simone. Antinuclear Autoantibodies, Recurrent Miscarriage and Outcome of Pregnancy. University of Rome Tor Vergata, Italy
      - c. Adalgisa Pietropolli, Manuela Veglia, Carlo Ticconi, Riccardo Marana, Valentina Bruno, Emilio Piccione, Giovanni Scambia, Nicoletta Di Simone. Effect of Treatment with Low Molecular Weight Heparin (LMWH) in Women with Recurrent Miscarriage (RM) According to the Number of Pregnancy Losses. University of Rome Tor Vergata, Italy
4. Winning abstract for maternal-fetal section from the Annual Meeting AGUI 2016 (Associazione Ginecologi Universitari Italiani), 30/09/16- 01/10/2016, Napoli, Italy:
  - Valentina Bruno, Maria Vittoria Capogna, Federica Martelli, Simona Sarta, Adalgisa Pietropolli. Effect of chorionic villus sampling on placental volume and vascularization in the first trimester of pregnancy
5. Poster 36th Annual Meeting of the American Society for Reproductive Immunology, November 12-16, 2016, Baltimore, USA:
  - V Bruno, J Svensson-Arvelund, L Matthiesen, G Berg, E Piccione, MC Jenmalm, J Emerudh. Effects of low molecular weight heparin (LMWH) on the polarization and cytokine profile of macrophages (MΦ) and T helper (Th) cells in vitro
6. Oral Presentation – Young Researchers Day; 4th April, 2017– Dept. of Biomedicine and Prevention; “Tor Vergata” University: “ORL1/Loxin in unexplained RPL”.
7. Poster - Young Researchers Day; 7th March, 2018– Dept. of Biomedicine and Prevention; “Tor Vergata” University: “ Autoimmunity and Recurrent Pregnancy Loss (RPL): 10-years clinical experience at Tor Vergata University Hospital”.
8. Abstract from the 26th Congress of the European Board and College of Obstetrics and Gynecology (EBCOG 2018), March 8-10, 2018, Paris:
  - Oral Presentation: V Bruno, J Svensson-Arvelund, M Rubér, G Berg, E Piccione, MC Jenmalm, J Emerudh. "Potential beneficial effects of low molecular weight heparin (LMWH) in vitro on the polarization and cytokine profile of macrophages and T helper cells in the treatment of recurrent miscarriage (RM)"
9. Abstract from the 15th Conference of the European Society for Reproductive Immunology, Aalborg, Denmark 28th- 31st August 2018, and winner in the competition for the Elsevier Young Investigator Award 2018 in Reproductive Immunology- Session: Clinical Science:
  - Oral presentation: \*Bruno Valentina, \*Rasmann Roepke Emma, Nedstrand Elizabet, Boij Roland, Pettersson Stridh Christine, Piccione Emilio, Berg Göran, Svensson-Arvelund Judit, Jenmalm Maria C, #Rubér Marie, #Emerudh Jan "Low molecular weight heparin effects on the immune response during pregnancy in women with unexplained recurrent pregnancy loss.
10. Human Reproduction, Volume 34, Issue Supplement\_1, July 2019, Pages i1–i543- Abstract from the 35th Annual Meeting of the European Society of Human Reproduction and Embryology (ESHRE 2019), June 23-26, 2019, Vienna, Austria:
  - Oral presentation: \*Bruno V.1, \*Biasiotti M.2, \*D'Orazio M.3, Pietropolli A.4, Abundo P.5, Ticconi C. 1, Martinelli E.3, Cianciullo C. 6, Pannone G.2, †Piccione E. 1, †Rosato N.2 Artificial Intelligence (AI) based-method applied in recurrent pregnancy loss (RPL) patients diagnostic work-up and classification: a potential innovation in common clinical practice. Abstracts of the 35th Annual Meeting of the European Society of Human Reproduction and Embryology.
11. Abstract from ESGO 2021: 22nd European Gynaecological Oncology Congress of the European Society of Gynaecological Oncology, Oct 23-25, 2021 - Prague, Czech Republic
  - ePoster: LOX1 and NALP3: V Bruno | G Corrado | L Ronchetti | B Chiofalo | M Iacobelli | A Lobascio | MA Carosi | P Nisticò | G Piaggio | E Vizza . "From immune tolerance disruption in pregnancy complications to immune escape in endometrial cancer."

12. Abstract from the 16th Congress of ESRI (European Society for Reproductive Immunology), 29th March-1st April 2022, Paris, France

- Oral Presentation: V.Bruno, F. Amati, C. Ticconi, S. Riccio, C. Vancheri, Barbara Rizzacasa, E. Splendiani, E. Ferretti, J. Emerudh, 7, E. Piccione, A. Pietropolli. "LMWH-induced miRNA changes in peripheral blood mononuclear cells in pregnancies with unexplained recurrent pregnancy loss"

13. Presented poster section, 24th European Congress on Gynaecological Cancer (ESGO 2023), Sep. 28- Oct. 1 2023, Istanbul, Turkey:

- "Integrating ESMO Guidelines With An Immunological Enhanced Endometrial Cancer Risk Classification Model"

14. Oral presentation- EUROGIN 2024, Stockholm, March 13 - 16, 2024. "Host immune response to HPV infection: using deconvolution tools from non-invasive samples low-volume RNA-seq data for tumor microenvironment profiling in cervical cancer progression and risk stratification, a pilot study".

#### CONGRESS SCIENTIFIC SECRETARY ACTIVITY

- Scientific secretary activity at the "Annual meeting AGUI" (Italian Association of Academic Gynecologists), Rome 2018; June 11-12, 2018, Rome

- Scientific secretary activity at the "16th SEGI National Congress"; June 20-22, 2022, Rome

- Member of the scientific work national group "Responsible SEGi (Italian Society of Gynecologic Endoscopy) YOUNG" for the center part of Italy area.

- 2024 Gynecological Oncology Masterclass, Medtronic Medical Education

-2024 Member of MITO (Multicenter Italian Trials in Ovarian cancer and gynecologic malignancies) group.

#### INTERNATIONAL EDITORIAL ACTIVITY AND REVIEWER ACTIVITY

- "Clinical and immunological aspects on recurrent pregnancy loss", edited by **Valentina Bruno**, Linköping University Medical Dissertation No. 1737 (ISBN: 978-91-7929-861-6, ISSN: 0345-0082). Printed by LiU-tryck, Linköping, Sweden, 2020

- "Book Chapter": ROLE OF ONCOLOGICAL THERAPIES ON FEMALE FERTILITY AND FERTOPROTECTIVE ADJUVANT TREATMENTS"; Fertility Preservation in Gynecological Cancer: Current Management and Novel Insights, Pages 249 - 2771 January 2021; ISBN 978-153619217-9. Authors: Bruni, Simone; Mancini, Emanuela; Baiocco, Ermelinda ; Bruno, Valentina ; Mancari, Rosanna ; Iacobelli, Marcello ; Lobascio, Mara ; Ronchetti, Liviab ; Vizza, Enrico. **2021**

-Invited author for a "Book Chapter": "Role of Artificial Intelligence" under Section 11: The Future. "Recurrent Pregnancy Loss-4/E" edited by Dr Mala Arora, Dr Neelanjana Mukhopadhyay, Dr Susheela Rani, and Prof. Asher Bashiri.

- Invited Guest Editor, special issue in "Frontiers in Oncology", **2020**

- Invited Guest Editor, special issue in "Frontiers in Immunology", **2022**

- Review Editor in the Editorial Board of Frontiers in Immunology, specialty section in Immunological Tolerance and regulation from **2022**

- Reviewer activity **from 2017:**

American Journal of Reproductive Immunology  
Cellular and Molecular Life Sciences  
eClinical Medicine (Lancet Journal)  
European Journal of Transplantation  
Frontiers in Oncology  
Frontiers in Pharmacology  
Genetic Testing and Molecular Biomarkers  
Italian Journal of Gynaecology & Obstetrics  
Journal of Experimental & Clinical Cancer Research  
Journal of Molecular Histology  
Journal of Reproductive Immunology  
Placenta  
Scientific Reports



FINANCED RESEARCH  
PROJECT

- Research Project "Mission: Sustainability" (D. R. n. 2817, 22/12/2016), Tor Vergata University. "IKiRM - Inflammatory and oxidant trophoblastic factors expression in unexplained Recurrent Miscarriages" (Codice Unico di Progetto (CUP): E81118000430001) - Principal Investigator: Prof.ssa A. Pietropolli. Role: Scientific Research Team.

-2019 Non-profit Study "From maternal-fetal immunotolerance to immune-escape in gynecologic malignancy: potential immuno-therapy targets in endometrial carcinoma. Pilot study." Promoter: IRCCS Istituto Nazionale Tumori Regina Elena- IRE (IRCCS Lazio Central Ethics Committee, IRCCS IFO section- RS 1224/19). Role Dr. Valentina Bruno: Principal Investigator - UOC Gynecologic Oncology, IRCCS Istituto Nazionale Tumori Regina Elena- IRE, Rome.

-2020 Grant "Post-Doctoral Fellowships - 2021", "Artificial Intelligence based- method applied to endometrial cancer patient classification: the introduction of potential immune score factors, customized on the knowledge of fetal-maternal interface immune tolerance pathways"; Fondazione Umberto Veronesi".

-2023 Mirxes Spatial Transcriptomics Grant Call [Explorer Award], "shared immune based transcriptome between maternal fetal interface and different steps of endometrial cancer progression".

## SCIENTIFIC PROJECT AS PI

2019 Non-profit multicenter study "Minimally invasive vs laparotomic surgery in uterine carcinosarcomas: a multi-center experience". Promoter: IRCCS Istituto Nazionale Tumori Regina Elena- IRE (IRCCS Lazio Central Ethics Committee, IRCCS IFO section- RS 1275/19). Role Dr. Valentina Bruno: Co Principal Investigator - UOC Gynecologic Oncology, IRCCS Istituto Nazionale Tumori Regina Elena- IRE, Rome.

2019 Non-profit multicenter study "Pattern of recurrence in FIGO stage IB1 cervical cancer: comparison of laparotomic vs minimally invasive surgical approach". Promoter: IRCCS Istituto Nazionale Tumori Regina Elena- IRE (IRCCS Lazio Central Ethics Committee, IRCCS IFO section- RS 1292/19). Role Dr. Valentina Bruno: Co Principal Investigator - UOC Gynecologic Oncology, IRCCS Istituto Nazionale Tumori Regina Elena- IRE, Rome.

2022 Nonprofit study "Immunotolerance in endometrial cancer and maternal-fetal interface: immunological profiling of the tumor microenvironment in risk stratification of recurrence." Promoter: IRCCS Istituto Nazionale Tumori Regina Elena- IRE (IRCCS Lazio Central Ethics Committee, IRCCS IFO section- Register Experiments 1807/22). Responsible as Principal Investigator: Dr. Valentina Bruno - UOC Gynecology Oncology, IRCCS Istituto Nazionale Tumori Regina Elena- IRE, Rome.

2023 Non-profit Study "Immunotolerance in endometrial cancer and maternal-fetal interface: Immunologic profiling of the tumor microenvironment in the stratification of the risk of recurrence". Promoter: IRCCS Istituto Nazionale Tumori Regina Elena- IRE (IRCCS Lazio Central Ethics Committee, IRCCS IFO section- RS 1292/19). Role Dr. Valentina Bruno: Co Principal Investigator - UOC Gynecologic Oncology, IRCCS Istituto Nazionale Tumori Regina Elena- IRE, Rome.

2023 Non-profit Study "The host immune response to HPV infection: use of tools for deconvolution from low-volume RNA-seq data for profiling the immunology of the tumor microenvironment in stratifying the prognosis. Pilot study". Promoter: IRCCS Istituto Nazionale Tumori Regina Elena- IRE (IRCCS Lazio Central Ethics Committee, IRCCS IFO section- RS 1292/19). Role Dr. Valentina Bruno: Co Principal Investigator - UOC Gynecologic Oncology, IRCCS Istituto Nazionale Tumori Regina Elena- IRE, Rome.

SCIENTIFIC PROJECT WITH  
INTERNATIONAL RESEARCH  
GROUP

2012- 2015 Open multi-centre randomised controlled trials, registered at EudraCT (protocol number: 2010-022715-19) conducted in Sweden, involving six centres in the south of Sweden: Helsingborg, Lund, Kalmar, Jönköping, Karlskrona and Linköping.

- Related published article: \*Rasmak Roepke E, \*Bruno V, Nedstrand, E. Boij, R, Strid, CP,

Piccione, E, Berg, G, Svensson Arvelund, J, Jenmalm, MC,\* Rubér, M,\* Emerudh, J. (\*These authors equally contributed). Low molecular- weight-heparin increases Th1- and Th17-associated chemokine levels during pregnancy in women with unexplained recurrent pregnancy loss: a randomised controlled trial. Scientific Reports, Volume 9, Issue 1, 1 December 2019, Article number 12314

2018 No profit project "Effects of low molecular weight heparin on the polarization and cytokine profile of macrophages and T helper cells in vitro". Promotore (no profit): Linkoping University, Sweden.

- Related published article: \*V Bruno,\* J Svensson-Arvelund, M Rubér, G Berg, E Piccione, MC Jenmalm, J Emerudh (\*These authors equally contributed). "Effects of low molecular weight heparin on the polarization and cytokine profile of macrophages and T helper cells in vitro". Sci Rep. 2018 Mar 8;8(1):4166.

2024 "RACC-trial, Robot-assisted Approach to Cervical Cancer", A multi-centre open-label randomised non-inferiority trial of robotassisted laparoscopic surgery versus laparotomy in women with earlystage cervical cancer. Coordinating Investigator: Henrik Falconer MD. PhD. Associate Professor, Karolinska University Hospital, Stockholm, Sweden. **Dr. Bruno V. role:** Research team centro partecipante- UOC Ginecologia Oncologica, IRCCS Istituto Nazionale Tumori Regina Elena- IRE, Roma.

## SCIENTIFIC AWARDS

- Clinical Young Investigator Award 2018 in Reproductive Immunology. 15th Congress of ESRI (European Society for Reproductive Immunology), August 2018, Aalborg, Denmark.

- Winning abstract for maternal-fetal section from the Annual Meeting AGUI 2016 (Associazione Ginecologi Universitari Italiani), 30/09/16- 01/10/2016, Napoli, Italy

## ACADEMIC TEACHING ACTIVITIES:

2023 Qualified as Associate Professor by the National Scientific Habilitation, 5<sup>th</sup> section 2021-2023, Italian Ministry of University and Research (MIUR).

### ... At National Universities

University of Rome Tor Vergata, Degree Course in Obstetrics, Faculty of Medicine, teaching in "Methodology of scientific research," Rome- A.A. 2017-2018

University of Rome Tor Vergata, Bachelor of Science in Obstetrics, Faculty of Medicine, teaching in "Pathophysiology of human reproduction," Rome- A.Y. 2018-2019

University of Rome Tor Vergata, Biochemical Nanotechnology in Medicine as part of the Degree Course in Biomedical Engineering, External Lecturer for the course "Cancer Immunology and Immunotherapy", Rome- A.A. 2018-2019

University of Rome Tor Vergata, Faculty of Medicine and Surgery, Degree Course in Obstetrics, teaching in "Pathophysiology of Human Reproduction," Rome- A.Y. 2019-2020

University of Rome Tor Vergata, Biochemical Nanotechnology in Medicine within the Bachelor of Science in Biomedical Engineering, External Lecturer for the course "Cancer Immunology and Immunotherapy," Rome- A.Y. 2021-2022

Since 2023 Professor in the Ph.D. Program in Biochemistry and Molecular Biology, Department of Experimental Medicine, University of Rome Tor Vergata, Rome, Italy

### ... At International Universities

Catholic University of Tirana "Our Lady of Good Counsel", Tirana, Albania, Graduate School of Gynecology and Obstetrics, Adjunct Professor in the subject for scientific merit, teaching in "Gynecological and Reproductive Immunology"- A.Y. 2020-2021, A.Y. 2021-2022, A.Y. 2022-2023

UniCamillus - Saint Camillus International University of Health and Medical Sciences, Rome, Italy, Adjunct Professor in Obstetrics and Gynecology, Bachelor of Science in Obstetrics, teaching in "Internal medicine, surgical sciences, prenatal medicine, childbirth assistance"- A.Y. 2021-2022, A.Y. 2022-2023, A.Y. 2023-2024

CERTIFICATION

2009 "Interactive Lesson on Pediatric airways disobstruction maneuvers and Infant Safe Sleep in New ILCOR, Guidelines 2005 " - the Italian Red Cross

2022 ACLS, Advanced Cardiovascular Life Support, American Heart Association