



ANDREA BORINI

Laureato in Medicina e Chirurgia presso l'Università degli Studi di Bologna nel 1986, nel 1991 si è specializzato in Ginecologia ed Ostetricia presso lo stesso ateneo. Dal 1983 al 1992 ha frequentato il Servizio di Fisiopatologia della Riproduzione diretto dal Prof. Carlo Flamigni, interessandosi di metabolismo degli ormoni steroidei, carcinoma dell'endometrio, problematiche della menopausa, creazione del modello sperimentale di perfusione extracorporea di utero umano, metodiche di fecondazione artificiale.

Dall'ottobre 1989 al maggio 1991 è stato Research Fellow presso l'Università di California Irvine a Irvine, California. Durante tale periodo ha frequentato il "Center for Reproductive Health" diretto dal Prof. Ricardo Asch svolgendo attività di ricerca nel campo dell'infertilità di coppia e delle metodiche di fecondazione assistita.

Nel 2007 ha conseguito il master Universitario di II Livello in Andrologia, presso l'Università di Padova; sempre presso lo stesso ateneo, nel 2008, ha conseguito il Diploma di Perfezionamento Universitario in Andrologia. Nell'anno accademico 2008/2009 è stato docente al Master Internazionale Di Medicina della Riproduzione tenutosi presso l'Università di Padova.

Dal 1985 è socio della Società Italiana di Fertilità e Sterilità (SIFES). Dal 1991 è socio della American Fertility Society (AFS). Dal 1991 è socio della European Society for Human Reproduction and Embryology (ESHRE). Dal 2002 al marzo 2008 è stato presidente di Cecos Italia. Dal 1994 al 2000 è stato reviewer per la rivista *Human Reproduction*. Nel 1997 è stato reviewer per la rivista *Human Reproduction Update*.

E' membro dell'Editorial Board di Riviste scientifiche quali *Reproductive BioMedicine online* e *Journal of Assisted Reproductive Medicine and Genetics*.

Dal 1993 è responsabile clinico del centro di fecondazione assistita di Tecnobios Procreazione a Bologna. E' responsabile clinico e ha curato l'organizzazione e l'apertura dei centri affiliati a Tecnobios Procreazione presenti nelle città di Bergamo, Pescara, Pesaro e Treviso.

ELENCO PRINCIPALI PUBBLICAZIONI

- 1. The efficacy and safety of human oocyte cryopreservation by slow cooling.**
Borini A., Coticchio G. *Semin Reprod Med.* 2009 Nov;27(6):443-9.
- 2. Inadvertent recombinant human follicle stimulating hormone bolus instead of human chorionic gonadotrophin leads to the retrieval of competent oocytes in IVF program.**
Bianchi V, Prato LD, Maccolini A, Mazzone S, Borini A. *Fertil Steril.* 2009 Sep 2.

- 3. Comparison of IVF and ICSI when only few oocytes are available for insemination.**
Borini A., Gambardella A, Bonu MA, Dal Prato L, Sciajno R, Bianchi L, Cattoli M. *Reprod Biomed Online*. 2009 Aug;19(2):270-5.
- 4. A PolScope evaluation of meiotic spindle dynamics in frozen-thawed oocytes.**
Sereni E, Sciajno R, Fava L, Coticchio G, Bonu MA, Borini A. *Reprod Biomed Online*. 2009 Aug;19(2):191-7.
- 5. Vaginal parturition decreases recurrence of endometriosis.**
Bulletti C, Montini A, Setti PL, Palagiano A, Ubaldi F, Borini A. *Fertil Steril*. 2009 Jun 12.
- 6. Over 900 oocyte cryopreservation babies born with no apparent increase in congenital anomalies.**
Noyes N, Porcu E, Borini A. *Reprod Biomed Online*. 2009 Jun;18(6):769-76.
- 7. Meiotic spindle dynamics in human oocytes following slow-cooling cryopreservation.**
Bromfield JJ, Coticchio G, Hutt K, Sciajno R, Borini A., Albertini DF. *Hum Reprod*. 2009 Sep;24(9):2114-23. Epub 2009 May 22.
- 8. Anomalies in sperm chromatin packaging: implications for assisted reproduction techniques.**
Tarozzi N, Nadalini M, Stronati A, Bizzaro D, Dal Prato L, Coticchio G, Borini A. *Reprod Biomed Online*. 2009 Apr;18(4):486-95.
- 9. Comparative analysis of the metaphase II spindle of human oocytes through polarized light and high-performance confocal microscopy.**
Coticchio G, Sciajno R, Hutt K, Bromfield J, Borini A., Albertini DF. *Fertil Steril*. 2009 Feb 23.
- 10. Individualizing FSH dose for assisted reproduction using a novel algorithm: the CONSORT study.**
Olivennes F, Howles CM, Borini A., Germond M, Trew G, Wikland M, Zegers-Hochschild F, Saunders H, Alam V; CONSORT study group. *Reprod Biomed Online*. 2009 Feb;18(2):195-204.
- 11. Focus on breast and ovarian cancer.**
Borini A., Rebellato E. *Placenta*. 2008 Oct;29 Suppl B:184-90.
- 12. Gamete quality and preserving fertility**
Borini A. *J Gynecol Obstet Biol Reprod (Paris)*. 2008 Aug;37 Suppl 1:S14-7. French.
- 13. Characterization, expression, and functional activity of pituitary adenylate cyclase-activating polypeptide and its receptors in human granulosa-luteal cells.**
Morelli MB, Barberi M, Gambardella A, Borini A., Cecconi S, Coticchio G, Canipari R. *J Clin Endocrinol Metab*. 2008 Dec;93(12):4924-32. Epub 2008 Sep 9.
- 14. Ultrastructure of human mature oocytes after slow cooling cryopreservation with ethylene glycol.**
Nottola SA, Coticchio G, De Santis L, Macchiarelli G, Maione M, Bianchi S, Iaccarino M, Flamigni C, Borini A. *Reprod Biomed Online*. 2008 Sep;17(3):368-77.
- 15. Pelvic factor infertility: diagnosis and prognosis of various procedures.**
Bulletti C, Panzini I, Borini A., Coccia E, Setti PL, Palagiano A. *Ann N Y Acad Sci*. 2008 Apr;1127:73-82.
- 16. Clinical efficiency of oocyte and embryo cryopreservation.**
Borini A., Cattoli M, Bulletti C, Coticchio G. *Ann N Y Acad Sci*. 2008 Apr;1127:49-58.
- 17. Vaginal gel versus intramuscular progesterone for luteal phase supplementation: a prospective randomized trial.**
Dal Prato L, Bianchi L, Cattoli M, Tarozzi N, Flamigni C, Borini A. *Reprod Biomed Online*. 2008 Mar;16(3):361-7.
- 18. A putative mitotic checkpoint dependent on mTOR function controls cell proliferation and survival in ovarian granulosa cells.**
Yaba A, Bianchi V, Borini A., Johnson J. *Reprod Sci*. 2008 Feb;15(2):128-38.
- 19. Freezing spermatozoa obtained by testicular fine needle aspiration: a new technique.**

- Sereni E, Bonu MA, Fava L, Sciajno R, Serrao L, Preti S, Distratis V, Borini A. Reprod Biomed Online. 2008 Jan;16(1):89-95.
- 20. Molecular methods for selection of the ideal oocyte.**
Patrizio P, Fragouli E, Bianchi V, Borini A., Wells D. Reprod Biomed Online. 2007 Sep;15(3):346-53.
- 21. Objective evaluation of the viability of cryopreserved oocytes.**
De Santis L, Cino I, Coticchio G, Fusi FM, Papaleo E, Rabellotti E, Brigante C, Borini A., Ferrari A. Reprod Biomed Online. 2007 Sep;15(3):338-45.
- 22. Evidence-based clinical outcome of oocyte slow cooling.**
Borini A., Bianchi V, Bonu MA, Sciajno R, Sereni E, Cattoli M, Mazzone S, Trevisi MR, Iadarola I, Distratis V, Nalon M, Coticchio G. Reprod Biomed Online. 2007 Aug;15(2):175-81.
- 23. Permeability of human oocytes to ethylene glycol and their survival and spindle configurations after slow cooling cryopreservation.**
De Santis L, Coticchio G, Paynter S, Albertini D, Hutt K, Cino I, Iaccarino M, Gambardella A, Flamigni C, Borini A. Hum Reprod. 2007 Oct;22(10):2776-83. Epub 2007 Aug 3.
- 24. Truths and myths of oocyte sensitivity to controlled rate freezing.**
Coticchio G, Bonu MA, Sciajno R, Sereni E, Bianchi V, Borini A. Reprod Biomed Online. 2007 Jul;15(1):24-30.
- 25. Clinical relevance of sperm DNA damage in assisted reproduction.**
Tarozzi N, Bizzaro D, Flamigni C, Borini A. Reprod Biomed Online. 2007 Jun;14(6):746-57.
- 26. Differential sucrose concentration during dehydration (0.2 mol/l) and rehydration (0.3 mol/l) increases the implantation rate of frozen human oocytes.**
Bianchi V, Coticchio G, Distratis V, Di Giusto N, Flamigni C, Borini A. Reprod Biomed Online. 2007 Jan;14(1):64-71.
- 27. Ultrastructure of human mature oocytes after slow cooling cryopreservation using different sucrose concentrations.**
Nottola SA, Macchiarelli G, Coticchio G, Bianchi S, Cecconi S, De Santis L, Scaravelli G, Flamigni C, Borini A. Hum Reprod. 2007 Apr;22(4):1123-33. Epub 2006 Dec 11.
- 28. Best protocol for frozen-thawed embryo transfer-cost benefit analysis needed.**
Dal Prato L, Borini A. Fertil Steril. 2006 Nov;86(5):1554-5; author reply 1555-6. Epub 2006 Aug 22.
- 29. Sperm DNA fragmentation: paternal effect on early post-implantation embryo development in ART.**
Borini A., Tarozzi N, Bizzaro D, Bonu MA, Fava L, Flamigni C, Coticchio G. Hum Reprod. 2006 Nov;21(11):2876-81. Epub 2006 Jun 22.
- 30. Cumulative pregnancy rates resulting from the use of fresh and frozen oocytes: 7 years' experience.**
Borini A., Lagalla C, Bonu MA, Bianchi V, Flamigni C, Coticchio G. Reprod Biomed Online. 2006 Apr;12(4):481-6.
- 31. Sucrose concentration influences the rate of human oocytes with normal spindle and chromosome configurations after slow-cooling cryopreservation.**
Coticchio G, De Santis L, Rossi G, Borini A., Albertini D, Scaravelli G, Alecci C, Bianchi V, Nottola S, Cecconi S. Hum Reprod. 2006 Jul;21(7):1771-6. Epub 2006 Mar 20.
- 32. Strategies and clinical outcome of 250 cycles of Preimplantation Genetic Diagnosis for single gene disorders.**
Fiorentino F, Biricik A, Nuccitelli A, De Palma R, Kahraman S, Iacobelli M, Trengia V, Caserta D, Bonu MA, Borini A., Baldi M. Hum Reprod. 2006 Mar;21(3):670-84. Epub 2005 Nov 25.
- 33. Live birth after IVF in a 46-year-old woman.**
Dal Prato L, Borini A., Cattoli M, Preti MS, Serrao L, Flamigni C. Reprod Biomed Online. 2005 Oct;11(4):452-4.

- 34. Criteria to assess human oocyte quality after cryopreservation.**
Coticchio G, Bonu MA, Bianchi V, Flamigni C, Borini A. Reprod Biomed Online. 2005 Oct;11(4):421-7.
- 35. Clinical outcome of oocyte cryopreservation after slow cooling with a protocol utilizing a high sucrose concentration.**
Borini A., Sciajno R, Bianchi V, Sereni E, Flamigni C, Coticchio G. Hum Reprod. 2006 Feb;21(2):512-7. Epub 2005 Oct 20.
- 36. Tailoring FSH and LH administration to individual patients.**
Borini A., Dal Prato L. Reprod Biomed Online. 2005 Sep;11(3):283-93.
- 37. Polar body morphology and spindle imaging as predictors of oocyte quality.**
De Santis L, Cino I, Rabellotti E, Calzi F, Persico P, Borini A., Coticchio G. Reprod Biomed Online. 2005 Jul;11(1):36-42.
- 38. Predictive factors for embryo implantation potential.**
Borini A., Lagalla C, Cattoli M, Sereni E, Sciajno R, Flamigni C, Coticchio G. Reprod Biomed Online. 2005 May;10(5):653-68.
- 39. Use of antagonists in ovarian stimulation protocols.**
Dal Prato L, Borini A. Reprod Biomed Online. 2005 Mar;10(3):330-8.
- 40. Meiotic spindle imaging in human oocytes frozen with a slow freezing procedure involving high sucrose concentration.**
Bianchi V, Coticchio G, Fava L, Flamigni C, Borini A. Hum Reprod. 2005 Apr;20(4):1078-83. Epub 2005 Mar 10.
- 41. Artificial reproductive technology achievements for optimizing embryo quality.**
Borini A., Lagalla C, Sciajno R, Distratis V, Bonu MA, Cattoli M, Coticchio G. Ann N Y Acad Sci. 2004 Dec;1034:252-61.
- 42. What criteria for the definition of oocyte quality?**
Coticchio G, Sereni E, Serrao L, Mazzone S, Iadarola I, Borini A. Ann N Y Acad Sci. 2004 Dec;1034:132-44.
- 43. Volume changes of mature human oocytes on exposure to cryoprotectant solutions used in slow cooling procedures.**
Paynter SJ, Borini A., Bianchi V, De Santis L, Flamigni C, Coticchio G. Hum Reprod. 2005 May;20(5):1194-9. Epub 2005 Jan 21.
- 44. Pregnancies and births after oocyte cryopreservation.**
Borini A., Bonu MA, Coticchio G, Bianchi V, Cattoli M, Flamigni C. Fertil Steril. 2004 Sep;82(3):601-5.
- 45. Mouse oocyte meiotic resumption and polar body extrusion in vitro are differentially influenced by FSH, epidermal growth factor and meiosis-activating sterol.**
Coticchio G, Rossi G, Borini A., Grøndahl C, Macchiarelli G, Flamigni C, Fleming S, Cecconi S. Hum Reprod. 2004 Dec;19(12):2913-8. Epub 2004 Sep 3.
- 46. Half-dose depot triptorelin in pituitary suppression for multiple ovarian stimulation in assisted reproduction technology: a randomized study.**
Dal Prato L, Borini A., Coticchio G, Cattoli M, Flamigni C. Hum Reprod. 2004 Oct;19(10):2200-5. Epub 2004 Jul 22.
- 47. Perifollicular vascularity monitoring and scoring: a clinical tool for selecting the best oocyte.**
Borini A., Tallarini A, Maccolini A, Prato LD, Flamigni C. Eur J Obstet Gynecol Reprod Biol. 2004 Jul 1;115 Suppl 1:S102-5.
- 48. GnRH analogs: depot versus short formulations.**
Dal Prato L, Borini A., Cattoli M, Bonu MA, Sereni E, Flamigni C. Eur J Obstet Gynecol Reprod Biol. 2004 Jul 1;115 Suppl 1:S40-3.
- 49. Fate of stored embryos: our 10 years experience.**
Cattoli M, Borini A., Bonu MA. Eur J Obstet Gynecol Reprod Biol. 2004 Jul 1;115 Suppl 1:S16-8.

- 50. Oocyte cryopreservation: a biological perspective.**
Coticchio G, Bonu MA, Borini A., Flamigni C. Eur J Obstet Gynecol Reprod Biol. 2004 Jul 1;115 Suppl 1:S2-7.
- 51. Influence of thyroid hormone on mouse preantral follicle development in vitro.**
Cecconi S, Rossi G, Coticchio G, Macchiarelli G, Borini A., Canipari R. Fertil Steril. 2004 Mar;81 Suppl 1:919-24.
- 52. Oocyte freezing: a positive comment based on our experience.**
Borini A., Coticchio G, Flamigni C. Reprod Biomed Online. 2003 Jul-Aug;7(1):120.
- 53. Endometrial preparation for frozen-thawed embryo transfer with or without pretreatment with gonadotropin-releasing hormone agonist.**
Dal Prato L, Borini A., Cattoli M, Bonu MA, Sciajno R, Flamigni C. Fertil Steril. 2002 May;77(5):956-60.
- 54. Perifollicular vascularity and its relationship with oocyte maturity and IVF outcome.**
Borini A., Maccolini A, Tallarini A, Bonu MA, Sciajno R, Flamigni C. Ann N Y Acad Sci. 2001 Sep;943:64-7.
- 55. Cryopreservation of human oocytes.**
Coticchio G, Garetti S, Bonu MA, Borini A. Hum Fertil (Camb). 2001;4(3):152-7.
- 56. Effect of duration of estradiol replacement on the outcome of oocyte donation.**
Borini A., Dal Prato L, Bianchi L, Violini F, Cattoli M, Flamigni C. J Assist Reprod Genet. 2001 Apr;18(4):185-90.
- 57. Effect of reduced dose of triptorelin at the start of ovarian stimulation on the outcome of IVF: a randomized study.**
Dal Prato L, Borini A., Trevisi MR, Bonu MA, Sereni E, Flamigni C. Hum Reprod. 2001 Jul;16(7):1409-14.
- 58. Freezing a few testicular spermatozoa retrieved by TESA.**
Borini A., Sereni E, Bonu, Flamigni C. Mol Cell Endocrinol. 2000 Nov 27;169(1-2):27-32.
- 59. Study of aneuploidy in normal and abnormal germ cells from semen of fertile and infertile men.**
Bernardini L, Borini A., Preti S, Conte N, Flamigni C, Capitanio GL, Venturini PL. Hum Reprod. 1998 Dec;13(12):3406-13.
- 60. Laparoscopic surgery and assisted reproductive techniques. Combined strategies of therapy in infertile women.**
Seracchioli R, Trevisi MR, Ferlini F, Petracchi S, Colombi C, Borini A., Balicchia B, Porcu E. Ann N Y Acad Sci. 1997 Sep 26;828:316-25.
- 61. Use of recombinant leukemia inhibitory factor in embryo implantation.**
Borini A., Bulletti C, Cattoli M, Serrao L, Polli V, Alfieri S, Flamigni C. Ann N Y Acad Sci. 1997 Sep 26;828:157-61.
- 62. Transforming growth factor-beta 1 in the human endometrium.**
Polli V, Bulletti C, Galassi A, Borini A., Ciotti PM, Seracchioli R, Alfieri S, Flamigni C. Gynecol Endocrinol. 1996 Oct;10(5):297-302.
- 63. Oocyte donation programme: results obtained with intracytoplasmic sperm injection in cases of severe male factor infertility or previous failed fertilization.**
Borini A., Bafaro MG, Bianchi L, Violini F, Bonu MA, Flamigni C. Hum Reprod. 1996 Mar;11(3):548-50.
- 64. Oocyte donation program: pregnancy and implantation rates in women of different ages sharing oocytes from single donor.**
Borini A., Bianchi L, Violini F, Maccolini A, Cattoli M, Flamigni C. Fertil Steril. 1996 Jan;65(1):94-7.
- 65. Improvement of pregnancy and implantation rates in cyclic women undergoing oocyte donation after long-term down-regulation.**

- Borini A., Violini F, Bianchi L, Bafaro MG, Trevisi MR, Flamigni C. Hum Reprod. 1995 Nov;10(11):3018-21.
- 66. Counselling post-menopausal women for donor in-vitro fertilization and hormone replacement therapy.**
Flamigni C, Borini A. Hum Reprod. 1995 May;10(5):1237-41.
- 67. Controlled ovarian hyperstimulation in women > or = 40 years old undergoing IVF-ET: mid-luteal versus early follicular (flare-up) GnRH analog regimens.**
Borini A., Trevisi MR, Bafaro MG, Cattoli M, Bianchi L, Flamigni C. Acta Eur Fertil. 1995 Mar-Apr;26(2):59-61.
- 68. The abnormally large follicle during controlled ovarian hyperstimulation: management and outcome of the cycle.**
Alam V, Manzur A, Borini A., Asch RH, Balmaceda JP. Fertil Steril. 1995 Feb;63(2):361-5.
- 69. Pregnancies in postmenopausal women over 50 years old in an oocyte donation program.**
Borini A., Bafaro G, Violini F, Bianchi L, Casadio V, Flamigni C. Fertil Steril. 1995 Feb;63(2):258-61.
- 70. Influence of spermatozoa characteristics on gamete intra-fallopian transfer procedures: analysis of results obtained utilizing normozoospermic, oligoasthenozoospermic and donor spermatozoa.**
Seracchioli R, Bafaro G, Bianchi L, Borini A., Cattoli M, Maccolini A, Violini F, Tirelli S, Flamigni C. Hum Reprod. 1993 Dec;8(12):2098-101.
- 71. Oocyte donation: comparison between recipients from different age groups.**
Flamigni C, Borini A., Violini F, Bianchi L, Serrao L. Hum Reprod. 1993 Dec;8(12):2088-92.
- 72. Embryo implantation rates in stimulated and hormonal replacement cycles: uterine versus tubal transfers.**
Balmaceda JP, Borini A., Alam V. Acta Eur Fertil. 1993 Jul-Aug;24(4):159-62.
- 73. The role of gamete intrafallopian transfer (GIFT) and tubal embryo transfer (TET) in the treatment of patients with patent tubes associated with male infertility factor.**
Seracchioli R, Maccolini A, Porcu E, Borini A., Cattoli M, Ciotti P, Violini F, Flamigni C. J Assist Reprod Genet. 1993 May;10(4):266-70.
- 74. Embryo implantation rates in stimulated and hormonal replacement cycles: uterine versus tubal transfers.**
Balmaceda JP, Borini A., Alam V. Acta Eur Fertil. 1991 Sep-Oct;22(5):259-62.
- 75. Increased extraction of estrogens in human endometrial hyperplasia and carcinoma.**
Bulletti C, Jasonni VM, Tabanelli S, Ciotti P, Cappuccini F, Borini A., Flamigni C. Cancer Detect Prev. 1988;13(2):123-30.