

PERSONAL INFORMATION

Name

ANNA TERESA BAGNATO, PHD

Phone

(+39) 06 5266 5618

Fax

(+39) 06 5266 2600

E-mail

annateresa.bagnato@ifo.gov.it

Date of birth

Sex Nationally

July 1984	Degree in Biology at the University of Rome "La Sapienza"
July 1989	Specialization in General Pathology at the University of Rome "La Sapienza"

POSITION HELD

Resident student at the University Sapienza of Rome for the Graduation thesis.
Enrolled as research fellow in the Regina Elena National Cancer Institute for Cancer Research post- graduation training.
Research fellow Italian Association for Cancer Research (AIRC) at the Regina Elena National Cancer Institute
Collaboration research at the University of Rome "La Sapienza" in the Institute V Clinica Medica concerning the identifications of receptors for several intragonadal peptides.
Guest researcher in the Endocrinology and Reproductive Research Branch, NICH, NIH, Bethesda, MD, USA on project supervisioned by M.D. Kevin J. Catt concerning the autocrine/paracrine action of ovarian peptides acting on G-protein completed receptors.
Group Leader in Staff the Laboratory of Molecular Pathology (at the Regina Elena National Cancer Institute (IRE) of Rome, Italy
Responsible Lab. "A" Development Therapeutic Programme Department (IRE) Rome
Head of Preclinical Models and New Therapeutic Agents Unit (IRE)

PERSONAL STATEMENT

	Dr.Bagnato's research has identified the key role of the endothelin axis in the development and the progression of cancer and in the acquisition of chemoresistance, in particular in ovarianand colon carcinoma and cutaneous melanoma model. The participation to an international network produced important preclinical contributions defining the role of endothelin axis in human tumors which represent the translational basis that will lead to the introduction of novel targeted therapies in the ovarian cancer management. She is author of 110 scientific publications on peer reviewed journals (PNAS, Nature Rev. Cancer, Cancer Research, Nat. Commun.) with a H-index of 41 (Scopus) and a total of 5437 citations.	
--	---	--

CLINICAL STUDIES

Dr.ssa Anna Bagnato		"A phase II, Double-blind, Placebo-controlled, Multi-centre, Randomised Study of ZD4054 plus Carboplatin and Paclitaxel or Placebo plus Carboplatin and Paclitaxel in Patients with Advanced Ovarian Cancer Sensitive to Platinum-based Chemotherapy" Principal Translational Scientist: Dr.ssa Anna Bagnato	
---------------------	--	--	--

PROFESSIONAL ACTIVITIES

2019-pres.	Member of Institutional Committee of Patient Centrality
2017-pres.	Member of Institutional Committee of Gender Medicine
2015-pres.	Member of AIRC Technical Scientific Committee
1992-pres.	Principal Investigator of differents grants by public and private agencies and by the industry
2000-pres.	Reviewing in indexed International journals and in Grant cancer research agencies
2016-pres.	Member of Editorial Board J. Exp. Clin. Cancer Res.
2007-2019	Organizing Committee 10-16 Int. Conference on Endothelin
2010	Organizing Committee 52 Annual Meeting of the Italian Cancer Society (SIC), Rome, Italy 2010
2010-2013	Member of SIC Board
2011-pres.	Member of different national and international Award for Cancer Research Selection Committee
2011-pres.	Supervisor for undergraduated and PhD students of Universities of Rome, and for fellows granted by public and private agency
2001-pres.	Lecturer, Chairman or Invited Speaker at numerous international and national meetings
2003-pres.	Media interviews/Articles

PROFESSIONAL SOCIETIES

- Member Italian Society of Cancerology
- Member European Association for Cancer Research
- Member American Association for Cancer Research

AWARDS AND HONORS

- Nature Review Cancer Prize CNIO Cancer conference, Cadherins, Catenins and Cancer, Madrid, November 19 December 1, 2004
- National Award "Virginia Centurione Bracelli", April, 15, 2012
- National Award "Roche per la Ricerca" 2016

Publications (last 5 years)

- 90. Rosanò L. and <u>Bagnato A</u>. Disrupting endothelin and Wnt relationship to overcome chemoresistance. Mol. Cell. Oncology 2:3, e995025; 2015
- 91. Semprucci E, Tocci P, Cianfrocca R, Sestito R, Caprara V, Veglione M, Castro VD, Spadaro F, Ferrandina G, <u>Bagnato A*</u>, Rosanò L. Endothelin A receptor drives invadopodia function and cell motility through the β-arrestin/PDZ-RhoGEF pathway in ovarian carcinoma. Oncogene. 2015 doi: 10.1038/onc.2015.403 (*co-corr. author)
- 92. Sestito R., Cianfrocca R., Rosanò L., Tocci P., Semprucci E., Dì Castro V., Caprara V., Ferrandina G., Sacconi A., Blandino G., <u>Bagnato A</u>. miR-30a inhibits endothelin A receptor and chemoresistance in ovarian carcinoma. Oncotarget 7:4009-23, 2016
- 93. Tocci P, Cianfrocca R, Sestito R, Caprara V, Di Castro V, <u>Bagnato A</u>, Rosanò L. Endothelin-1/endothelinA receptor axis activates RhoAGTPase in epithelial ovarian cancer. Life Sci. 159, 49-54, 2016
- 94. Sestito R., Cianfrocca R. Rosanò L., Tocci P., Di Castro V., Caprara V., <u>Bagnato A</u>. Macitentan blocks endothelin-1 receptor activation required for chemoresistant ovarian cancer cell plasticity and metastasis. Life Sci. 159, 43-48, 2016
- 95. Rosanò L and <u>Bagnato A</u>. Endothelin therapeutics in cancer: where are we? Am J PhysiolRegulIntegr Comp Physiol.310, 469-75, 2016
- 96. Cianfrocca R., Tocci P., Rosanò L., Caprara V., Sestito R., Di Castro V., <u>Bagnato A</u>. Nuclear β-arrestin-1 is a critical cofactor of hypoxia-inducible factor-1 signaling in endothelin-1-induced ovarian tumor progression. Oncotarget 7:17790-804, 2016
- 97. Rosanò L and <u>Bagnato A</u>. β-arrestin1 at the cross-road of endothelin-1 signaling in cancer. J. Exp. Clin. Cancer Res. 35 (1) 121, 2016

- 98. <u>Bagnato A</u> and Rosanò L Endothelin-1 receptor drives invadopodia: Exploiting how β-arrestin-1 guides the way. Small GTPase 2016:1-5.
- 99.Russignan A, Spina C, Tamassia N, Cassaro A, Rigo A, Bagnato A, Rosanò L, Bonalumi A, Gottardi M, Zanatta L, Giacomazzi A, Scupoli MT, Tinelli M, Salvadori U, Mosna F, Zamò A, Cassatella MA, Vinante F, Tecchio C.Endothelin-1 receptor blockade as new possible therapeutic approach in multiple myeloma. Br. J. Haematology.178:781-793, 2017
- 100, Rosanò L and <u>Bagnato A.</u>Targeting endothelin-1 receptor/β-arrestin network for the treatment of ovarian cancer. Exp. Op. Therap. Target. 21:925-932,2017
- 101.Cianfrocca R, Rosanò L, Tocci P, Sestito R, Caprara V, Di Castro V, De Maria R, <u>Bagnato A</u>.Blocking endothelin-1-receptor/β-catenin circuit sensitizes to chemotherapy in colorectal cancer.Cell Death Differ.24:1811-1820,2017
- 102. Di Modugno F, Caprara V, Chellini L, Tocci P, Spadaro F, Ferrandina G, Sacconi A, Blandino G, Nisticò P, <u>Bagnato A*</u>. RosanòL.hMENA is a key regulator in endothelin-1/β-arrestin1-induced invadopodial function and metastatic process.ProcNatlAcadSci USA.115:3132-3137, 2018. (*co-corr. author)
- 103.Russignan A, Spina C, Tamassia N, Cassaro A, Rigo A, <u>Bagnato A</u>, Rosanò L, Bonalumi A, Gottardi M, Zanatta L, Giacomazzi A, Scupoli MT, Tinelli M, Salvadori U, Mosna F, Zamò A, Cassatella MA, Vinante F, Tecchioln reply to Schäfer et al: New evidence on the role of Endothelin-1 axis as a potential therapeutic target in Multiple Myeloma. Br. J. Haematology. 2018 May 4. doi: 10.1111/bjh.15240
- 104.Chellini L, Caprara V, Spadaro F, Sestito R, <u>Bagnato A</u>, Rosanò L. Regulation of extracellular matrix degradation and metastatic spread by IQGAP1 through endothelin-1 receptor signalling in ovarian cancer. Matrix Biol. 2018 Oct 25. pii: S0945-053X(18)30303-2.
- 105. <u>Bagnato A.</u> Rosanò L. New routes in GPCR/β-arrestin-driven signalling in cancer progression and metastasis. Front. Pharmacol. Feb. 2019. doi: 10.3389/fphar.2019.00114
- 106.Rosanò L, Cianfrocca R, <u>Bagnato A.</u> Methods to Investigateβ-Arrestin-1/β-Catenin Signaling in Ovarian Cancer Cells. Methods Mol Biol.2019;1957:393-406. doi: 10.1007/978-1-4939-9158-7_25
- 107. Rosanò L, <u>Bagnato A</u>. New insights into the regulation of the actincytoskeleton dynamics by GPCR/β-arrestin in cancer invasion and metastasis.IntRev Cell Mol Biol. 2019;346:129-155. doi: 10.1016/bs.ircmb.2019.03.002.
- 108.Tocci P, Cianfrocca R, Di Castro V, Rosanò L, Sacconi A, Donzelli S, BonfiglioS, Bucci G, Vizza E, Ferrandina G, Scambia G, Tonon G, Blandino G, Bagnato A. β-arrestin1/YAP/mutant p53 complexes orchestrate the endothelin A receptorsignaling in high-grade serous ovarian cancer. Nat Commun. 2019 Jul19;10(1):3196. doi: 10.1038/s41467-019-11045-8
- 109.Tocci P, Rosanò L, <u>Bagnato A.</u> Targeting Endothelin-1 Receptor/β-Arrestin-1Axis in Ovarian Cancer: From Basic Research to a Therapeutic Approach. Front Endocrinol (Lausanne). 2019 Sep 4;10:609. doi: 10.3389/fendo.2019.00609.

Book Chapters

- 1. <u>Bagnato A</u>, Natali P.G.: Targeting endothelin axis in cancer. In Molecular targeting and signal transduction. Edited by Kumar R: Kluwer Academic Publishers; 293-314, 2004.
- 2. <u>Bagnato A.</u> Therapeutic targeting of the endothelin receptor in cancer. In: Cancer Therapy: Molecular targets in tumor-host Interactions, ed: G.F. Weber 169-186. Horizon Bioscience 2005.
- 3. <u>Bagnato A.</u>Tumori In "Antagonisti recettoriali dell'endotelina quali composti e quali patologie" Eds A. Benigni, G. Remuzzi. Il pensiero Scientifico Editore pp. 77-86, 2008.