Curiculum Vitae

Professor Antonio Llombart-Bosch M.D.

- Born in San Sebastian, Spain, 1935. Married with four children.

Education

- MD degree in Medicine and Surgery, University of Valencia, Spain, 1959.
- PhD doctorate 1965.

Current research interests

- PROTHETS. European Consortium. Grant of the EU. Contractor Nº: 503056 (2005-2008). Prognosis and therapeutic targets in the "Ewing family of tumors".
- EUROBONET, European Network to Promote Research into Uncommon Cancers in Adults and Children.
- FISS project Madrid: Nº P1040822 (2005-2008). Study of differential diagnostic markers, and mechanisms of tumor progression in undifferentiated sarcomas of bone and soft tissues, with special reference to the ES/PNET family of tumors.
- Conselleria de Empresa, Universidad y Ciencia. Proyecto Nº ID-2004/GV/4B208. (2005-2007): Characterization of biological factors associated with human renal carcinogenesis induced by prolonged exposure to low-dose ionizing radiation following the Chernobyl nuclear accident (Ukraine).

Current positions

- Professor Emeritus, Faculty of Medicine, University of Valencia, Spain.
- Invited Professor, Faculty of Medicine, Universidad del Norte, Barranquilla, Colombia.
- Invited Professor, Instituto Superior de Ciencias Medicas, Habana, Cuba.
- President, Fundación Instituto Valenciano de Oncología (IVO).

Current appointments and awards

- Executive Committee Member, International Union Against Cancer (UICC).
- Scientific Advisor, Asociación de Ligas Latinoamericanas contra el Cáncer, (ALICC).
- Member, Executive Committee (Treasurer), European Organization of Cancer Institutes (OECI) (2001–2007).
- Advisor, EFEC Ecole de Formation Européenne en Cancérologie, FNCLCC, France.
- Member of several Editorial Boards of International Scientific Journals.
- Honorary Member of many Scientific Societies and Royal Academies of Medicine.
- Officer of the Order of the French Legion of Honor (France, 2002).
- Santiago Ramón y Cajal Award, 2007 (SEAP Tarragona).
- Golden Medal, City of Valencia 2007.
- President, Educational Committee. Valencia Medical Association (2006 to date).

Previous appointments and activities

- Professor of Pathology, University of Valencia, (1975 to 2005).
- Dean of Medical School, (1980-83, 1990-93).
- Director of Pathology Department, (1983-90, 1993-1999). Directed 54 PhD degree theses.
- Former President and Chairman of several National and International Pathology Organizations.
- Principal investigator in several national and international projects.
- International investigations in collaboration with centers in: France, USA, Germany, Italy, Cuba, Ukraine and Russia.
- Organizer of several International Congresses.
- Books and Book Chapters in 27 scientific publications.

- 570 scientific articles published in National (284) and International (286) Journals.

Principal areas of developed lines of research

- Experimental and Human Urological and Renal Carcinogenesis.
- Biopathology of Undifferentiated Sarcomas in Bone and Soft Tissue.
- Experimental and Human Liver Cancer.
- Cytogenetics and Molecular Biology of Solid Neoplasms in Humans.
- Breast Cancer.
- Descriptive Pathology of Human and Experimental Neoplasms.

PRINCIPAL AREAS OF DEVELOPED LINES OF RESEARCH

1. EXPERIMENTAL AND HUMAN UROLOGICAL AND RENAL CARCINOGENESIS.

Study of the histogenesis and biology of kidney tumors induced experimentally through Diethylstilbestrol (DES), as well as the combined action of DES and ethylnitrosourea (ENU) in Syrian golden hamsters (Doctoral Thesis- Bull Cancer 52:11, 1965; J Pharm Sci 10:1744, 1968; Eur J Cancer 11:403, 1975; Springer Verlag ed. 1985; Carcinogenesis 11: 1727, 1990, Carcinogenesis 14:1215, 1993; Carcinogenesis 15: 2155, 1994; Li JJ, et al. eds., Springer Verlag, NY, pp:185, 1996; Jones TC, et al. eds., Springer Verlag, NY, 1997, J Li et al. eds, Springer Verlag, NY, 2001; Hormonal Carcinogenesis IV, Springer Verlag NY pp 450-454, 2004), the susceptibility of interstitial cells and tubular segments in the nephron for malignant transformation (Electron Microsc 3:845, 1992), the cellular and molecular mechanisms involved in kidney carcinogenesis induced through erythroblastosis aviar virus and their correlations with human nephroblastoma (Lab Invest 66:152, 1992), study of mutations in the *Alu* repeated sequences in induced kidney tumors by means of *Alu-RAPD fingerprinting* (Mutagenesis 19(1):67-73, 2004; Hormonal Carcinogenesis IV. Springer Verlag NY pp 475-479, 2004). Prognostic factors in human carcinomas through morphologic and biological markers (Histopathology 4:321, 1980; Carcinogenesis 15:1631, 1994; Path Res Pract 192:1275, 1996; Int J Surg Pathol 3:219, 1996; Cancer Genet Cytogenet 92:28, 1996; Genes Chromosomes Cancer 15:170, 1996; Cancer Genet Cytogenet 92:28, 1996; J Urol Pathol 8:69, 1998; Anticancer Res 18:677, 1998; Oncology Reports 6:639, 1999).

Histological, immunohistochemical and molecular studies of the oxidative stress effects on induced renal carcinogenesis of prolonged exposure to low intensity ionizing radiation in patients from Ukraine after the Chernobyl nuclear accident (Int J Cancer 87:880, 2000; Virchows Arch 438:156, 2001; Diagn Mol Pathol 11:163, 2002; Anticancer Res 23:5005-5010, 2003; Virchows Arch 445:298-304, 2004; Virchows Arch 445:292-297,2004; Anal Quant Cytol Histol 26:285-294,2004; Current Diagn Pathol 11:141-150,2005; Eur Urol 25(1B):497-504,2005; Virchows Arch 448:584-590,2006).

2. BIOPATHOLOGY OF UNDIFFERENTIATED SARCOMAS IN BONE AND SOFT TISSUE.

Establishment of criteria for their differential diagnosis using histological, ultrastructural, immunohistochemical and molecular techniques (Pathol Annu 17:113, 1982; Eur J Cancer 30:827, 1994; Virchows Arch 424: 243, 1994; Pathol Res Pract 193, 1997; Int J Surg Pathol 6:61, 1998; Genes Chromosomes Cancer 23:358, 1998; Diagn Mol pathol 9:137, 2000; Appl Imm Mol Morphol 9:225, 2001; Diagn Mol Pathol 11:9, 2002; Semin Diagn Pathol 20:25-45, 2003). The basis of the origin, nature and biology of different variants present within the Ewing's group of tumors (Cancer 41:1362, 1978; Pthol Res Pract 167:71, 1980; Virchows Arch 398:329, 1983; Pathol Res Pract 3:293, 1985; Int J Surg Pathol 7:185, 1999). Determination of the origin and neuroectodermic nature of Ewing's sarcoma of bone and soft tissue (Cancer 60:1570, 1987; Virchows Arch

412:421, 1988; Hum Pathol 20:273, 1989; Cancer 73:616, 1994; Arch Pathol Lab Med 118:608, 1994; Eur J Cancer 31:307, 1995; Int J Cancer 63:738, 1995; Diagn Mol Pathol 6:10, 1997; Pathol Res Pract 193:343, 1997), and experimental confirmatory results of the clinical model of this neoplasm by comparative analysis in xenografts and in vitro cell lines with differentiation assays and molecular biology techniques (Cancer 66:2589, 1990; Lab Invest 66:143, 1992; Pathol Res Pract 192:197, 1996; Virchows Arch 430:291, 1997; Diagn Mol Pathol 13:52-59, 2004). Evaluation of anatomical and histological predictive factors with clinical prognostic significance (Virchows Arch 409:627, 1986; Semin Diagn Pathol 13:250, 1996; Lab Invest 81:803, 2001; Diagn Mol Pathol 13:81-91, 2004; Virchows Arch 446:46-51,2005; Histopathology 46:622-634,2005; Diagn Mol Pathol 14:134-139,2005; J Clin Oncol 23:6190-6198, 2005; Rev Esp Patología 38:149-156,2005; Virchows Arch 449:435-447,2006; Seminars Diagn Histopathol 23:103-110,2006; Am J Clin Pathol 126:866-874,2006; Cancer Genet Cytogenet 172:23-28,2007).

3. EXPERIMENTAL AND HUMAN LIVER CANCER.

Morphological (optical and ultrastructural), immunohistochemical and molecular qualification of human and rat hepatocarcinomas (Verh Dtsch Ges Pathol 60:412, 1976; Pathol Res Pract 182:783, 1987; Virchows Arch 434:497, 1999; Int J Surg Pathol 8:267, 2000), with special emphasis on the significance of oval cell proliferation in the mechanisms of experimental carcinogenesis (Virchows Arch 54:341, 1988; Electron Microsc 3:845, 1992; In Vitro Cell Dev Biol Anim 37:17, 2001).

4. CYTOGENETICS AND MOLECULAR BIOLOGY OF SOLID NEOPLASMS IN HUMANS.

Identification of a number of chromosomal abnormalities associated with human sarcomas in bone and soft tissue (Cancer Genet Cytogenet 33:291 and 33:311, 1988; Cancer Genet Cytogenet 39:159, 1989; Cancer Genet Cytogenet 63:129, 1992; Cancer Genet Cytogenet 90:57, 1996; Cancer Genet Cytogenet 99:121, 1997; Diagn Mol Pathol 6:333, 1997; Diagn Mol Pathol 7:16, 1998; Diagn Mol Pathol 7:16, 1998; Cancer Genet Cytogenet 109:150, 1999; Virchows Arch 434:307, 1999; Diagn Mol Pathol 10:2, 2001), neuroblastomas (Int J Surg Pathol 7:149, 1999), gliomas (Virchows Arch 435:301, 1999), astrocytomas (Int J Surg Pathol 7:205, 1999), meduloblastomas (Cancer Genet Cytogenet 57:235, 1991; Cancer Genet Cytogenet 96:81, 1997; J Neuro Oncol 39:168, 1998) and meningiomas (Cancer Genet Cytogenet 85:113, 1995; Int J Surg Pathol 4:301, 1995; Clin Neuropatho 17:210, 1998; J Neuro Oncol 39:174, 1998; J Neuro Oncol 47:99, 2000; Cancer Genet Cytogenet 125:119, 2001; Cancer Genet Cytogenet 148:123, 2004) as well as in several types of carcinomas (Prog Pathol XI:137, 1988; Int J Pathol 8:277, 1989; Cancer Genet Cytogenet 75:150, 1994; Genes Chromosomes Cancer 10:210, 1994; Arch Esp Urol. 56: 277, 2003; Cancer 97: 1876, 2003; Virchows Arch 445:292-297, 2004; An Pediatria (Barc) 64:449-456,2006; Virchows Arch 449:277-278,2006; Virchows Arch 449:410-420,2006).

5. BREAST CANCER.

Member of the Group of Experts appointed by the WHO for the histological classification of breast tumors (Am J Clin Pathol 78:806, 1982). Description of the new entities and new morphological parameters in several types of breast neoplasm (Virchows Arch, 366:1, 1975; Pathol Res Pract 178:289, 1984; Breast Dis 1:81, 1985; Cancer Genet Cytogenet 38:187, 1989; Path Res Pract 191:547, 1995). Determination of morphological and morphometrical parameters with prognostic significance in clinical oncology, especially those related to c-erbB-2 hyperexpression (Cancer 52:728, 1983; Arkh Patol 65: 50, 2003; Rev Senología y Patol Mam 16:80, 2003; Int. J. Cancer, 2005, in press), and vascular neogenesis (The Breast 8:21, 1999; Pathol Res Pract 195:741, 1999; Arkh Patol 65: 50, 2003; Rev Senología y Patol Mam 16:80, 2003; Int J Cancer 118:1743,2005; Virchows Arch (in press), 2007).

6. DESCRIPTIVE PATHOLOGY OF HUMAN AND EXPERIMENTAL NEOPLASMS.

A large number of publications (in both Spanish and International journals) have been devoted to the in-depth study of neoplasms using modern technology, such as Electron Microscopy (Transmission and Scanning), tissue culture, cytometry, cytofluorometry, cytochemistry-immunohistochemistry and molecular biology techniques. These papers are mainly oriented towards the clarification of histogenesis, prognostic value and therapeutic outcome of such neoplasms (Virchows Arch 435:71, 1995; Histopathology 33:542, 1998; Oncology Reports 6:639, 1999; Cancer Genet Cytogenet 108:70, 1999; Int J Surg Pathol 7:235, 1999; Nedurochemical Res 25:389, 2000; J Clin Oncol 18:27, 2000; Int J Surg Pathol 8:253, 2000; Am J Dermatopathol 22:371, 2000; Int J Surg Pathol 9:250, 2001; Eur J Cancer 37:114, 2001; J Reprod Med 46:845, 2001; Histopathology 39:493, 2001; Histopathology 39:498, 2001; Am J Clin Pathol 117:126, 2002; Ultrastructural Pathology 26:15, 2002; Histopathology 41:134, 2002; Kazan, Editorial Publishing Center "Ttul" Cap. 8 y 25, 2004; Eur J Gynaec Oncol XXV:71-78, 2004; Histopathology 46:622-634, 2005; Hormonal Carcinogensis IV, pp 450-454 and 475-479, Springer Verlag NY, 2005; Virchows Arch 446:46,2005; Virchows Arch 450:235-237,2007).