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## BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
<b>Vassilis C Zoumpourlis</b>	Research Associate Professor, Head of the research team of Biomedical Applications Unit, Inst of Biological Research and Biotechnology, NHRF

### EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University J E Purkyne, Brno, Czech Republic	Diploma-1986	1981-1986	Mol. Biology and Genetics
University J E Purkyne, Brno, Czech Republic	M.Sc.-1987	1986-1987	Mol. Genetics
Nat Hellenic Research Foundation	PhD	1989-1994	Mol. Biology of HIV-1
Nat Hellenic Research Foundation	Post-Doc/	1994-1998	Mol. Biology of cancer

### Positions and Employment

- 1998-2003 Functional Scientist, Grade B, IBRB, NHRF
- 2003-2006 Functional Scientist, Grade A, IBRB, NHRF
- 2006- Research Associate Professor, IBRB, NHRF
- 2002- Head of the research team of Biomedical Applications Unit, IBRB, NHRF.

### Honors and Awards

- 1981-86: Scholarship from University J E Purkyne, Brno, Czech Republic (best performance)
- 1996: Hellenic Pneumonological Society, 3<sup>rd</sup> prize
- 2000: University of Athens, 3<sup>rd</sup> prize
- 2000: Hellenic Society of General Pathology and Pathological Anatomy, Galinos prize
- 2002: 4<sup>th</sup> Hellenic Conference of Cancer markers, 3<sup>rd</sup> prize
- 2007: 2<sup>nd</sup> Bioscience Conference, University of Patras, 1<sup>st</sup> prize
- 2007: 2<sup>nd</sup> Bioscience Conference, University of Patras, 2<sup>nd</sup> prize
- 2007: Fullbright award for academic period 2007-2008, for research in UCSF Comprehensive Cancer Center, University of California, San Francisco
- 2009 : 3<sup>nd</sup> International Kallikrein Symposium, Minch Germany, 1<sup>st</sup> prize

**Research interests.** Molecular Biology of cancer, stem cell biology

## RESEARCH ACTIVITIES ABROAD

1992	Visitor researcher, Molecular Oncology Group, Department of Clinical Dental Sciences, The University of Liverpool, UK
1993	Visitor researcher, Molecular Oncology Group, Department of Clinical Dental Sciences, The University of Liverpool, UK
1995	Visitor researcher, Marie Curie Institute, Paris, France
1998	Visitor researcher, Department of Molecular Cell Biology, Sylvius Laboratory, Leiden, Netherlands
2002	Visitor researcher, Department of Molecular Biology, Amsterdam, Netherlands
2004	Visitor researcher, Department of Molecular Oncology, Mazaryk Institute, Brno, Czech R
2005	Visitor researcher, Department of Molecular Oncology, Mazaryk Institute, Brno, Czech R
2007	Visitor researcher, Paterson Institute, Department of Cancer Research, Manchester, UK
2007	Visitor researcher, Roy Castle Lung Cancer Institute, The University of Liverpool, Department of Clinical and Molecular Cancer Medicine, UK
2008	Visitor researcher, UCSF Comprehensive Cancer Center, University of California, San Francisco, USA

## Peer-reviewed Publications

1. Progression of mouse skin carcinogenesis is associated with increased estrogen receptor alpha (ER $\alpha$ ) levels and is repressed by a dominant negative form of ER $\alpha$ . Dimitra Papaevangeliou, Stella Ilogotheti, Ioannis Christodoulou, Katerina Pyrrillou, John Michalopoulos, Vassilis G. Gorgoulis, Spiros Vlachopoulos and Vassilis Zoumpourlis. (*Submitted 2011*)

2. Global DNA hypomethylation-induced DNP73 transcriptional activation in non-small cell lung cancer. Alexandros Daskalos, Soultana Markopoulou, George Xenarianos, John R Cosney, Stella Ilogotheti, Vassilis Zoumpourlis, John K. Field, and Triantafyllos Liloglou, *Cancer Lett.* **300(1):79-86, 2011**

3. Ilogotheti S, Michalopoulos I, Sideridou M, Daskalos A, Kossida S, Spandidos DA, Field JK, Vojtesek B, Liloglou T, Gorgoulis V, Zoumpourlis V. Sp1 binds to the external promoter of the p73 gene and induces the expression of TAp73gamma in lung cancer. *FEBS J* **277: 3014-3027, 2010**

4. Rizos EN, Michalopoulou PG, Siafakas N, Stefanis N, Douzenis A, Rontos I, Laskos E, Kastania A, Zoumpourlis V, Lykouras L. Association of Serum Brain-Derived Neurotrophic Factor and Duration of Untreated Psychosis in First-Episode Patients with Schizophrenia. *Neuropsychobiology* **62: 87-90, 2010**

5. Volanis D, Kadiyska T, Galanis A, Delakas D, Ilogotheti S, Zoumpourlis V. Environmental factors and genetic susceptibility promote urinary bladder cancer. *Toxicol Lett.* **193: 131-137, 2010**

6. Vassilis G. Gorgoulis, Michalis Liontos, Katerina Niforou, Georgia Velimezi, Konstantinos Vougas, Konstantinos Evangelou, Radek Vrtael, Alexandros Damalas, Panayiotis Kontovazenitis, Athanassios Kotsinas, Vassilis Zoumpourlis, George Th. Tsangaris, Christos Kittas, Doron Ginsberg, Thanos D. Halazonetis and Jiri Bartek<sup>3</sup> Modulation of the E2F1-driven cancer cell fate by the DNA damage response machinery and potential novel E2F1 targets in osteosarcomas. *Am J Pathol.* **175:376-91, 2009.**

7. Woodcock S, Rooney C, Lontos M, Connolly Y, Zoumpourlis V, Whetton A, Gorgoulis V and A Malliri. Src-induced disassembly of adherens junctions requires localised phosphorylation and degradation of Tiam-1. *Molecular Cell* **33**, 1-15, 2009.
8. Copland J, Sheffield-Moore M, Koldzic Zivanovic C, Lamprou G, Tzortzatos-Stathopoulou F, Zoumpourlis V, Urban R, and Vlahopoulos S Sex steroids and their receptors at the crossroads between differentiation and neoplasia: a perspective for therapeutic intervention. *Bioessay* **31**:629-41, 2009
9. Georgios Pampalakis, Evangelia Prosnikli, Theodora Agalioti, Antonia Vlahou, Vassilis Zoumpourlis and Georgia Sotiropoulou. A tumor protective role for human kallikrein 6 in breast cancer. *Cancer Res* **69**: 3779-87, 2009.
10. Frydrych I, Mlejnek P, Dolezel P, Zoumpourlis V, Krumpochova P. The broad-spectrum caspase inhibitor Boc-Asp-CMK induces cell death in human leukaemia cells. *Toxicol in Vitro* **22**: 1356-60, 2008
11. Spiros A. Vlahopoulos, Stella Logotheti, Dimitris Mikas, Athina Giarika, Vassilis Gorgoulis and Vassilis Zoumpourlis. The role of ATF-2 in oncogenesis. *Bioessay* **30**: 314-327, 2008.
12. Bakas P, Liapis A, Vlahopoulos S, Giner M, Logotheti S, Creatsas G, Meligova AK, Alexis MN, Zoumpourlis V. Estrogen receptor alpha and beta in uterine fibroids: a basis for altered estrogen responsiveness. *Fert. Ster. 1*: 1-8, 2008
13. Lontos M, Koutsami M, Sideridou M, Evangelou K, Kletsas D, Levy B, Kotsinas A, Nahum O, Zoumpourlis V, Kouloukoussa M, Lygerou Z, Taraviras S, Kittas C, Bartkova J, Papavassiliou AG, Bartek J, Halazonetis TD, Gorgoulis VG. Deregulated overexpression of hCdt1 and hCdc6 promotes malignant behavior. *Cancer Research* **67**: 10899 -10909, 2007
14. Bartkova J, Rezaei N, Lontos M, Karakaidos P, Kletsas D, Issaeva N, Vassiliou LV, Kolettas E, Niforou K, Zoumpourlis VC, Takaoka M, Nakagawa H, Tort F, Fugger K, Johansson F, Sehested M, Andersen CL, Dyrskjot L, Orntoft T, Lukas J, Kittas C, Helleday T, Halazonetis TD, Bartek J, Gorgoulis VG. Oncogene-induced senescence is part of the tumorigenesis barrier imposed by DNA damage checkpoints. *Nature* **444**: 633-637, 2006
15. Vlahopoulos S, Zimmer WE, Jenster G, Belaguli NS, Balk SP, Brinkmann AO, Lanz RB, Zoumpourlis V and Schwartz RJ. Recruitment of the androgen receptor via serum response factor facilitates expression of a myogenic gene. *JBC* **280**: 7786-9, 2005
16. Papoutsi Z, Kassi E, Papaevangelidou D, Pratsinis H, Zoumpourlis V, Halabalaki M, Mitakou S, Kalofoutis A and P moutsatsou. Plant 2-Arylobenzofurans demonstrate a selective estrogen receptor modulator profile. *Steroids* **69**: 727-734, 2004
17. Papassava P, Gorgoulis V, Papaevangelidou D, Vlahopoulos S, van Dam H, and Zoumpourlis V. Overexpression of Activated Transcription Factor 2 is required for tumor growth and progression in mouse skin tumors. *Cancer Res* **64**: 8573-8584, 2004.
18. Vlahopoulos S and V Zoumpourlis. "JNK": a key modulator of intracellular signaling. *Biochemistry (Moscow)* **69**: 844-854, 2004
19. Zoumpourlis V, Solakidi S., Papatoma A. and Papaevangelidou D. Genetic alterations in signal transduction pathways implicated in tumour progression during multistage mouse skin carcinogenesis. *Carcinogenesis* **24**: 1159-1165, 2003.

20. Gorgoulis V, Zacharatos P, Mariatos G, Kletsas D, Zoumpourlis V, Kittas Ch, Ryan K and Papavassiliou A.. p53 activates ICAM-1 (CD54) expression in an NF- $\kappa$ B-independent manner. *EMBO J* 22: 1567-1578, 2003
21. Gazouli M, Kokotas S, Zoumpourlis V, Zacharatos P, Mariatos G, Kletsas D, Kittas Ch and Gorgoulis V. The complement inhibitor CD59 and the lymphocyte function-associated antigen-3 (LFA-3, CD58) genes possess functional binding sites for the p53 tumor suppressor protein. *Anticancer Research* 22: 4237-4242, 2002.
22. Katsanakis KD, Gorgoulis V, Papavassiliou A and Zoumpourlis V. The progression in the mouse skin carcinogenesis model is dependent on ERK1/2 signaling. *Molecular Med* 8: 624-637, 2002
23. Psichari E, Balmain A, Plows D, Zoumpourlis V and Pintzas A. High activity of serum response factor in the mesenchymal transition of epithelial tumor cells is regulated by Rho signaling. *J Biol Chem.* 277, 29490-29495, 2002.
24. Katsanakis K, Owen C, Zoumpourlis V. JNK and ERK signaling pathways in multistage mouse carcinogenesis: studies in the inhibition of signaling cascades as a means to understand their *in vivo* biological role. *Anticancer Research* 22, 755-760, 2002.
25. Plows D, Briassouli P, Owen C, Zoumpourlis V, Garrett M and A Pintzas. Ecdysone-inducible expression of oncogenic Ha-Ras in NIH 3T3 cells leads to transient nuclear localization of activated extracellular signal-regulated kinase regulated by mitogen-activated protein kinase phosphatase-1. *Biochem J* 362, 305-315, 2002
26. Papathoma A, Zoumpourlis V, Balmain A and A Pintzas. Role of Matrix Metalloproteinase-9 in Progression of Mouse Skin Carcinogenesis. *Molecular Carcinogenesis* 31, 74-82, 2001.
27. Kotsinas A, Gorgoulis VG, Zacharatos P, Mariatos G, Kokotas S, Liloglou T, Ikononopoulos Zoumpourlis V, Kyroudi A, Field JK, Asimakopoulos PJ and Kittas Ch. Additional characterization of a hexanucleotide polymorphic site in the first intron of human H-ras gene: comparative study of its alterations in non-small cell lung carcinomas and sporadic invasive breast carcinomas. *Cancer Genetics and Cytogenetics* 126, 147-154, 2001
28. Gorgoulis VG, Zacharatos P, Mariatos G, Liloglou T, Kokotas S, Kastrinakis N, Kotsinas A, Athanasiou A, Foukas P, Vogiatzi T, Zoumpourlis V, Kletsas D, Ikononopoulos J, Asimakopoulos PJ, Rossidakis G, Kittas Ch and Field JK. Deregulated expression of c-mos in non-small cell lung carcinomas: Relationship with p53 status, genomic instability and tumor kinetics. *Cancer Research* 61, 538-549, 2001
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31. Gorgoulis V, Zacharatos P, Manolis E, Ikononopoulos A, Damalas A, Rassidakis G, Zoumpourlis V, Kotsinas A, Rassidakis AN, Halazonetis T and Kittas C. Effects of p53

mutants derived from lung carcinomas bind the p53 - responsive element (p53 RE) of the MDM-2 gene. Relationship with MDM-2 expression. *British Journal of Cancer* 77, 374-384, 1998

32. Christeli E, Zoumpourlis V, Kiaris H, Ergazaki M, Vassilaros S and Spandidos DA. TGF- $\beta$ 1 overexpression in breast cancer. Correlation with clinicopathological data. *Oncology Reports* 3, 115-118, 1996

33 Gorgoulis V, Zoumpourlis V, Rassidakis GZ, Rassidakis AN, Spandidos DA and Kittas Ch. A molecular and immunohistochemical study of the MDM2 protein isoforms and p53 gene product in bronchogenic carcinoma. *Journal Pathology* 180, 129-137, 1996.

34. Zoumpourlis V and Spandidos DA. Transcriptional activation of the human immunodeficiency virus long terminal repeat sequences by retinoic acid in human epithelial and fibroblast tumor cell lines. *Journal of Biological Markers* 11, 153-158, 1996.

35. Zoumpourlis V, Zachos G, Halazonetis TD and Spandidos DA. Binding of wild-type and mutant forms of p53 protein in a specific DNA sequence of the first intron of the H-ras oncogene. *International Journal of Oncology* 7, 1035-1041, 1995.

36 Spandidos DA, Zoumpourlis V, Zachos G, Toas SH and Halazonetis TD. Specific recognition of a transcriptional element within the human H-ras proto-oncogene by the p53 tumor suppressor. *International Journal of Oncology* 7, 1029-1034, 1995.

37 Zachos G, Zoumpourlis V, Sekeris CE and Spandidos DA. Binding of the glucocorticoid and estrogen receptors to the human c-H-ras oncogene sequences. *International Journal of Oncology* 6, 595-600, 1995.

38 Field JK, Kiaris H, Risk JM, Tsiriyotis C, Adamson R, Zoumpourlis V, Rowley H, Taylor K, Whittaker J, Howard P, Beirne JC, Gosney JR, Woolgar J, Vaughan ED, Spandidos DA and Jones AS. Head and neck cancer allelotype indicates as ordered allele loss consistent with a two hit model of carcinogenesis. *British Journal of Cancer* 72, 1180-1188, 1995.

39 Gorgoulis V, Zoumpourlis V, Rassidakis G, Karameris A, Barbatis C, Spandidos DA and Kittas C. Molecular analysis of p53 gene in laryngeal premalignant and malignant lesions. P53 protein immunohistochemical expression is positively related to proliferating cell nuclear antigen (PCNA) labelling index. *Virchows Archives* 426, 339-344, 1995.

40 Spandidos DA, Zoumpourlis V, Gorgoulis V and Gourtsoyiannis NC. P53 expression in human small intestinal tumours. *Oncology Reports* 1, 885-889, 1994.

41 Field JK, Zoumpourlis V, Spandidos DA and Jones AS. P53 expression and mutations in squamous cell carcinoma of the head and neck: Expression correlates with the patients use of tobacco and alcohol. *Cancer Detection and Prevention* 18, 197-208, 1994.

42 Zoumpourlis V, Papadakis E, Delakas D, Cranidis A, Segas J, Papadakis H and Spandidos DA. Human lung, bladder and head and neck carcinoma tumors as compared to their normal tissue have elevated AP-1 activity and recognize sequence elements of the HIV-1 LTR. *Oncology Reports* 1, 403-409, 1994

43 Zoumpourlis V, Ergazaki M and Spandidos DA. AP-1 recognizes sequence elements on HIV-1 LTR in human epithelial tumour cell lines. *Oncology Reports* 1, 397-401, 1994.

- 44 Field JK, Tsiriyotis C, Zoumpourlis V, Howard P and Jones AS. Allele loss on chromosome 3 in squamous cell carcinoma of the head and neck correlates with poor clinical prognostic indicators. *International Journal of Oncology* 4, 543-549, 1994.
- 45 Zoumpourlis V and Spandidos DA. Mitomycin C stimulates the expression of human immunodeficiency virus long terminal repeat sequences in rat and human fibroblasts. *Biochemical Pharmacology* 46, 178-181, 1993.
- 46 Spandidos DA, Eliopoulos A and Zoumpourlis V. Regulation of oncogene and AIDS virus expression by cis-platin compounds. *Journal of Chemotherapy* 5, 778-779, 1993.
- 47 Zoumpourlis V, Kerr DJ and Spandidos DA. Differential interaction of cis-platin with HIV-1 long terminal repeat in a resistant ovarian carcinoma cell line. *Anti-Cancer Drugs* 4, 77-83, 1993.
- 48 Zoumpourlis V and Spandidos DA. Hexamethylene bisacetamide stimulates the expression of human immunodeficiency virus long terminal repeat sequences in rat and human fibroblasts. *Anti-cancer Drugs* 3, 163-167, 1992.
- 49 Zoumpourlis V, Eliopoulos A and Spandidos DA. Transcriptional activation of the human immunodeficiency virus long terminal repeat sequences by tumour necrosis factor. *Anticancer Research* 12, 2065-2068, 1992.
- 50 Zoumpourlis V, Kerr DJ and Spandidos DA. Carboplatin as opposed to cis-platin does not stimulate the expression of the human immunodeficiency virus long terminal repeat sequences. *Biochemical Pharmacology* 43, 650-654, 1992.
- 51 Zoumpourlis V, Kerr DJ and Spandidos DA. Doxorubicin stimulates transcription from the human immunodeficiency virus long terminal repeat sequences. *Cancer Letters* 56, 181-185, 1991.
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- 53 Spandidos DA, Zoumpourlis V, Kotsinas A, Tsiriyotis C and Sekeris CE. Response of human immunodeficiency virus long terminal repeat to growth factors and hormones. *Anticancer Research* 10, 1241-1246, 1990.
- 54 Zoumpourlis V, Patsilidakos P, Kotsinas A, Maurer HR, Lenas P and Spandidos DA. Cis-platin stimulates the expression from the human immunodeficiency virus long-terminal repeat sequences in human fibroblasts. *Anti-Cancer Drugs* 1, 55-58, 1990
- 55 Spandidos DA, Zoumpourlis V, Kotsinas A, Maurer HR and Patsilidakos P. Transcriptional activation of the human immunodeficiency virus long terminal repeat sequences by cis-platin. *Genetic Analysis Techniques and Applications* 7, 138-141, 1990.

#### **Publications in refereeds proceedings of international conferences and book chapters**

56. Spandidos DA, Chatzipanagiotou M and Zoumpourlis V. Prognostic significance of oncogenes and onco-suppressor genes in lung cancer. In: Proceedings of Seminar on Lung Cancer. *European School of Oncology*. Pp 26-29, 1994.

57. Spandidos DA, Chatzipapangiotou M and Zoumpourlis V. Oncogene and onco-suppressor gene lesions in lung cancer. In : *Proceedings of the International Congress for Lung Cancer*. G. Antypas (Ed.) Monduzzi Editore S.p.A. Bologna, Italy, pp 41-45, 1994.

58. Pintzas A, Zoumpourlis V and D Plows. Regulation of components of AP-1 transcription factor by early and late Ras signals. "Molecular mechanisms of signal transduction", **JL Bos (Ed.)**, IOS Press, 57-61, 2000

59. Zoumpourlis V, Papassava P, Pintzas A, Moutsatsou P and Katsanakis K. AP-1 transcription factors and steroid hormone receptors in multistage mouse skin carcinogenesis. *Epitheorese klinikes Farmakologias kai Farmakokinetikes*, 15, 123-128, 2001.

60. Zoumpourlis V, Pintzas A, Papassava P, Solakidi S and Papaevangelliou. Biological and chemical approach of the inhibition of signaling cascade in mouse skin carcinogenesis. *Review of clinical Pharmacology and genetics, International Edition 16 (1)*, pp111, 2002

61. Vlahopoulos S and V Zoumpourlis. Structure of DNA and its relationship to cancer. *Chapter 1 pp 1-26, Genome and Proteome in Oncology, Nova Science , 2005*