CURRICULUM VITAE

of

ARISTIDES ELIOPOULOS

Professor of Molecular & Cellular Biology

Medical School, University of Crete, Greece

June 2015

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Professor of Molecular & Cellular Biology Medical School, University of Crete, Greece

Date and Place of Birth: Citizenship:	12 July 1966, Athens, Greece Greek and British (dual)
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EDUCATION & TRAINING

1986 - 1990	B.Sc., Dept. of Chemistry, University of Athens, Greece	
1991 - 1994	Ph.D Molecular Biology, Medical School, University of Crete, Heraklion, Crete, Greece and National Hellenic Research Foundation, Athens, Greece. Title: <i>«Regulation of c-myc expression during</i> <i>differentiation of mouse erythroleukemic cells»</i> .	
1991 – 1992 (4 months)	Visiting Ph.D student, Department of Pharmaceutical Biochemistry, Freie Universität Berlin, Germany.	
1994 - 1995	Post-doctoral Research Fellow, Dept. of Clinical Oncology, University of Birmingham, Birmingham, UK.	
1996 - 2000	Post-doctoral Research Fellow, Cancer Research UK Institute for Cancer Studies, Birmingham, UK.	
2001 (9 months)	Visiting scientist (sabbatical), Department of Immunology and Microbiology, Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, USA	
2003 (2 months)	Visiting scientist, Molecular Oncology Research Institute, Tufts-New England Medical Center, Boston, USA.	
2011 (1 month)	Visiting scientist, Liverpool Cancer Center, University of Liverpool, UK.	

POSITIONS AND EMPLOYMENT

2012- present:	Professor, Head of the Molecular & Cellular Biology Laboratory, University of Crete Medical School, Heraklion, Greece.
2009- present:	Group Leader, Institute for Molecular Biology & Biotechnology – Foundation of Research Technology Hellas, Heraklion, Greece.
2005-2012:	Associate Professor, Head of Molecular & Cellular Biology Laboratory, University of Crete Medical School, Heraklion, Greece.
2000 - 2005:	Group leader, Cancer Research UK Institute for Cancer Studies, Birmingham, UK.
1995 - 2000:	Post-doctoral Research Fellow, Cancer Research UK Institute for Cancer Studies, Birmingham, UK.
1994 - 1995:	Post-doctoral Research Fellow, University of Birmingham, Dept. of Clinical Oncology, Birmingham, UK.

FELLOWSHIPS & AWARDS

- **2000:** Medical Research Council (MRC) Career Development Award, London, UK. This is one of 10 competitive awards given to junior scientists to lead new research groups in biomedicine. They are awarded following evaluation by international experts of a program proposal and interview of shortlisted candidates.vThe interviewing panel included academics from across the UK and a Nobel Prize Laureate. The award provided funding for personnel and consumables for 4 years.
- **1999:** Medical Research Council (MRC) Research Fellowship, London, UK. This is a 3-year fellowship awarded with the same procedure as above to post-docs who are envisaged to lead research groups. The award provided personal salary and funding for consumables (*interrupted because of the Career Development Award*).
- **1990: PhD fellowship** by the National Hellenic Research Foundation (Athens) following exams and interview.

ACADEMIC ACTIVITIES

I. UNDERGRADUATE TEACHING

- Tutor in the "Biology" module (60% contribution) of the University of Crete Medical School undergraduate course (1st semester) since 2005. A brief description of my contribution to the course is given on page 33.
- Tutor in the undergraduate module "Medical Genetics" (2nd semester) between 2005 2007 (2 years, 100% contribution).
- Tutorials in "Fundamentals of cellular biology", Bachelor in Medical Sciences course, University of Birmingham, UK (2000 2003).
- Supervision of 7 undergraduate research projects (9-10 months each) leading to BSc in Biology:
 - 1. Dimitra Vyrla, Department of Biology, University of Crete (2005 2006)
 - 2. Paloma Quesada Ballester, University of Barcelona (Erasmus Student, 2006)
 - 3. George Liperis, Department of Biology, University of Crete (2006 2007)
 - Maria Kouraki, Department of Biology, University of Crete (2006 2007):
 (Publication P-65 accompanies this project thesis)
 - 5. Katerina Vlahou, Department of Biology, University of Crete (2007-2008) (*Publication P-69 accompanies this project thesis*).
 - 6. Alexandra Papaioannou, Dept. of Biology, University of Crete (2012-2013)
 - 7. Eleytheria Lethaki, Department of Biology, University of Crete (2013-2014)
- Supervision of a voluntary research project by Ioanna Chranioti, medical student at the University of Crete (6 months, 2007).
- Coordinator of a public lecture at the University of Crete Medical School entitled "Cell Cycle" presented by medical students K Alexakis, G Vouyoukalaki, S Pantelakos and S Poulis in 2010. My role was to supervise students to organize their presentation and seek appropriate material.
- Coordinator of a presentation entitled "Inflammation & Cancer" and round the table discussion by 3rd Year University of Crete Medical School students A. Detta, I. Fothiadaki, A Sepetis, E Athanassopoulos, N. Galanakis and A. Chatzimichalis

at the 16th Scientific Meeting of Greek Medical Students, 16-18 April, 2010. My role was to assist students to organize their presentation and seek appropriate material and to coordinate the round the table discussion during the meeting.

II. POSTGRADUATE TEACHING

• **Tutorials** in Cancer Biology, 'Malignant Diseases' Module of the Postgraduate Program "*The Molecular Basis of Human Diseases*" of the University of Crete Medical School.

Topics:

Introduction to the Biology of Cancer (3 hours, academic years 2006-2015) *Inflammation and cancer* (2 hours, academic years 2006-2015)

• **Tutorials,** Postgraduate Program '*Molecular Biology - Biomedicine*' run jointly by the Medical School and the Department of Biology of the University of Crete: **Topics:**

NF-κB signal transduction. (2 hours, academic years 2006, 2008, 2009, 2011, 2013-2015)

Regulation of cytoskeletal dynamics by small GTPases (2 hours, academic years 2006, 2007, 2008, 2013)

- Tutorials, Postgraduate Program "Human Neoplasia: modern clinocopathological approaches and research" of the National and Kapodistrian University of Athens (2009 – 2014).
 Topic: Apoptosis and neoplasia
- **Tutorials** in specialized aspects of cancer biology for the MSc Program in medical sciences at the University of Birmingham (2000 2003).

• Supervision of 7 PhD Thesis projects:

- 1. Ms. S. Blake, University of Birmingham, 2000
- 2. Ms. C. Davies, University of Birmingham, 2003
- 3. Ms A. Baxendale, University of Birmingham, 2005
- 4. Ms K. Gkirtzimanaki, University of Crete, 2013

- 5. Ms S. Milliara, University of Crete, 2014
- 6. Mr A. Moschonas, University of Crete, 2014
- 7. Mr D. Kanelis, University of Crete, 2014
- Supervisor of 2 ongoing PhD and 2 post-doctoral projects
- Supervisor of 10 finalised MSc projects:
 - 1. A. Clayton, University of Birmingham, 1998
 - 2. S. Curbishley, University of Birmingham, 2000
 - 3. S. Milliara, University of Crete Medical School, 2005
 - 4. K. Gkirtzimanaki, University of Crete, Dept. of Biology, 2007 (*Publications P-68* and *P-73 accompany this thesis*)
 - 5. D. Kanelis, University of Crete Medical School, 2007
 - 6. A. Moschonas, University of Crete Medical School, 2008 (*Publication P-66 accompanies this thesis*)
 - 7. D. Vyrla, University of Crete Medical School, 2008
 - 8. A. Zaragoulias, University of Crete Medical School, 2009
 - 9. S. Gialesaki, University of Crete Medical School, 2014
 - 10. I. Skordos, University of Crete Medical School, 2015
- Member of the supervising committee of 8 PhD Theses :
 - 1. K. Sereti, University of Crete and Harvard University (2006 2012).
 - S. Logotheti, National Hellenic Research Foundation, Athens and University of Crete (2007 – 2011)
 - 3. M. Staitakis, Dept. of Biology, University of Crete (2007 2010)
 - 4. J. Carlton, University of Crete Medical School (2008 2012)
 - 5. C. Doxaki, University of Crete Medical School (2010 2014)
 - 6. E. Vlahava, University of Crete Medical School (2009 2015)
 - 7. I. Pelagiadis, University of Crete Medical School (2009 2015)
 - 8. K. Bakela, Dept. of Biology, University of Crete (2010 present)

III. ADMINISTRATIVE POSITIONS

• **Director of the Division of Basic Sciences**, University of Crete Medical School, 2008 and 2013 – 2014.

• Chair of the Research Facilities Committee, Medical School, University of Crete, 2014-present.

• Member of the Public Engagement Committee, Medical School, University of Crete, 2011-present.

• Member of the Research Ethics Committee, Medical School, University of Crete, 2011-2012.

• Member of the General Assembly, Medical School, University of Crete, 2009-2011 και 2012 -present.

• Member of the Animal Facility coordinating committee, Medical School, University of Crete, 2007- 2010.

• **Member of the coordinating committee** of the University of Crete Medical School Post-graduate program *The Molecular Basis of Human Diseases*", 2005-present.

• **Member of the coordinating committee** of the Postgraduate Program '*Molecular Biology - Biomedicine*' run jointly by the Medical School and the Department of Biology of the University of Crete, 2007-2009.

• **Member of evaluation committees** for the election of Faculty in the University of Crete (2007, 2012), Democritus University of Thrace (2007, 2012), University of Ioannina (2010), Centre for Research & Technology Hellas (2014) and Biomedical Research Foundation Academy of Athens (2015).

• **Coordinator of the evaluation committee** for the election of Faculty in the University of Crete (2011).

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• Coordinator of two (2) European Commission-funded programs, Apotherapy (2006 – 2009) and INFLA-CARE (2009 – 2013) with 6 and 21 participating research institutions (see page 12).

• **Coordinator** of the European Commission-funded program 'Translational Potential' (TransPOT) awarded to support infrastructure and research potential of the University of Crete Medical School (3,050,000 euro, 2012 – 2015). This program allowed the establishment of core facilities including a Good Manufacturing Practices Cell Therapy Unit and Genomics Facility.

• Founding Member and member of the coordination board of the *Hellenic Association for Molecular Cancer Research*, 2008 – present.

• **Member** of the *Hellenic Society of Biochemistry and Molecular Biology*, Greece (2013- present).

• **Coordinator of the undergraduate course (course modulator)** '*Biology*' of the University of Crete Medical School during academic years 2006-2007, 2007-2008, 2009-2010, 2013 – 2014 and 2015-2016.

• **Coordinator of the undergraduate course (course modulator)** '*Medical Genetics*' of the University of Crete Medical School during academic years 2005-2006 and 2006-2007.

• Coordinator of the post-graduate course (course modulator) 'Cancer Biology' of the University of Crete Medical School Post-graduate program The Molecular Basis of Human Diseases", 2005-present. Indicative student evaluations are given in Section XVI.

• Organizer of the 'Summer School in Inflammation and Cancer', (Fodele, Crete, 2010) attended by approx. 40 junior researchers from Greece, Cyprus, Italy, USA, Israel, Croatia, Germany, Austria etc. and more than 20 senior scientists (speakers).

• **Co-organizer of the 'Summer School in Inflammation, Cancer & Novel Therapeutics',** Heraklion, Crete, 2012. The summer school was attended by approx. 50 junior researchers from Greece, Cyprus, Italy, USA, Israel, Croatia, Germany, Austria etc.) and more than 20 senior scientists (speakers).

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• **Co-organizer of the Symposium** "Inflammatory Networks in Health & Disease Symposium", Heraklion, Crete, 2014.

• **Co-organizer of the** "Applications of Bioinformatics in Molecular Biology Symposium", Heraklion, Crete, 2014.

• Member of the Programme Scientific Committee of the 13th Hellenic Symposium of Pharmacochemistry, Athens, 14-15 March 2008.

• **Member of the Organizing Committee** of the 63rd Conference of the *Hellenic Society of Biochemistry and Molecular Biology*, Heraklion, Crete, 2012.

• **Member of the Research Committee** of the Institute for Cancer Studies, Birmingham, 2003 - 2005. The Committee comprised 10 senior scientists chaired by the Director and was responsible for the selection of new senior research staff, acquisition of new technologies, research assessment exercises etc.

• **Member of the Safety Committee** of the Institute for Cancer Studies, Birmingham, 2001 - 2005.

IV. REVIEWER OF GRANT PROPOSALS

- 1. Welcome Trust, U.K. (2001)
- 2. Medical Research Council, UK. (2003)
- Health and Health Services Research Fund, Hong Kong (2004, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015)
- 4. Italian Association for Cancer Research, Italy (2004)
- 5. The Austrian Science Fund, Austria (2006)
- 6. Croatian Research Council (2007, 2014)
- 7. Special Account for Research, University of Ioannina, Greece (2007).
- 8. Association for International Cancer Research, UK (2007, 2010, 2013)
- 9. University Grants Committee, Hong Kong (2009, 2010)
- 10. European Commission, European Research Council (ERC, 2009, 2011)
- 11. European Commission, Cancer Section (2009)
- 12. General Secretariat of Research & Technology of Greece (2010, 2014)
- 13. Cancer Research UK, Hv. Βασίλειο (2010, 2013).

V. REVIEWER IN SCIENTIFIC JOURNALS

- 1. Antimicrobial Agents and Chemotherapy (2008).
- 2. Arthritis Research and Therapy (2006)
- 3. Bioorganic and Medicinal Chemistry (2005)
- 4. Blood (2006, 2009)
- 5. Cancer (2006)
- 6. Cancer Investigations (2011)
- 7. Cancer Research (2004, 2008)
- 8. Cancer Gene Therapy (2005, 2006, 2007, 2008, 2009, 2010)
- 9. Carcinogenesis (1999)
- 10. Cell Death & Differentiation (2015)
- 11. Clinical and Vaccine Immunology (2005)
- 12. European Journal of Cancer (2009)
- 13. FEBS Letters (2010, 2011)
- 14. Gut (2000)
- 15. Human Genomics (2011)
- 16. Immunology (2002)
- 17. Immunological Investigations (2009)
- 18. International Journal of Oncology (2006)
- 19. Journal of Immunology (2013)
- 20. Journal of General Virology (2001)
- 21. Journal of Molecular Biology (2004)
- 22. Journal of Thrombosis and Haemostasis (2005)
- 23. Molecular and Cellular Biology (2005, 2007, 2010)
- 24. Molecular Cancer Research (2010)
- 25. Oncogene (2003, 2004, 2005, 2006, 2007, 2008)
- 26. Oncology Reports (2006)
- 27. Oncology Research & Treatment (2014)
- 28. Oral Diseases (1999)
- 29. Pharmacology Research (2003)
- 30. PLOS One (2011, 2013)
- 31. Proceedings of the National Academy of Sciences USA (2001, 2013)
- 32. Science (2008)
- 33. Scientific Reports (2015)
- 34. Tumor Biology (2011)

VI . COORDINATOR OF RESEARCH SEMINARS IN THE UNIVERSITY OF CRETE MEDICAL SCHOOL:

- 1. Dimitrios Iliopoulos (Harvard Medical School, Boston), 19 March 2007
- 2. Madalena Tarsunas (Oxford Medical School, UK), 22 March 2007
- 3. Frank Uhlmann (Cancer Research UK London Research Institute, UK), 23 March 2007.
- 4. Athanassios Giannis (Universität Leipzig, Germany), 24 January 2011.
- 5. Guang Peng (MD Anderson Cancer Center, Houston, USA), 11 October 2013.
- 6. Siniša Volarević (University of Rijeka School of Medicine, Croatia), 19 June 2014.
- 7. Vassiliki Kostourou (Ινστιτούτο Αλ. Φλέμιγκ, Αθήνα), 19 December 2014.
- 8. Aristides Moustakas (Ludwig Cancer Research Biomedical Center, Uppsala, Sweden), 25 February 2015.
- 9. Marco Sandri (University of Padova, Italy), 22 May 2015.
- **VII. EVALUATOR** of 25 PhD Theses in Greece (Universities of Athens, Patras and Crete), UK, Sweden and Spain.

VIII. EDITORIAL RESPONSIBILITES

- Invited Editor, *Current Opinion in Pharmacology* (Cancer Section, Issue 4, volume 4, 2004).
- Editor of the e-Newsletter of the EC-funded program 'INFLA-CARE' (http://inflacare.imbb.forth.gr), 2009 2014.
- Editor of the e-Newsletter of the EC-funded program 'TransPOT' (<u>http://transpot.med.uoc.gr</u>), 2011 2015.
- Associate Editor of the e-Newsletter of the University of Crete Medical School Post-graduate program *The Molecular Basis of Human Diseases*", 2008 2015.

IX. FUNDING

Title: Epigenetic regulation of gut stem cells in Drosophila melanogaster. Coordinator: A. Eliopoulos Funding Agency: Latsis Foundation Total Budget: €12,000 Budget for my team: €12,000 Duration: 01/01/2015 - 31/12/2015

Title: Exploiting molecular pathways of apoptotic cell death for the rational design of therapeutic strategies for colon cancer (Contract N[°] 11ΣYN_1_485). Coordinator: A. Eliopoulos Funding Agency: General Secretariat of Research & Technology of Greece Total Budget: €908,333 Budget for my team: €275,000 Duration: 01/05/2013 – 31/12/2015

Title: *TransPOT: Enhancing University of Crete Medical School Scientific Excellence and Translational Research Potential in Human Diseases* (Contract N^o 285948).

Coordinator: A. Eliopoulos Funding Agency: European Commission Total Budget: €3,050,000 Duration: 01/01/2012 – 30/06/2015

Title: INFLA-CARE: Understanding inflammation-associated tumorigenesis for the rational design of novel anti-cancer therapeutic strategies. (Contract N° 223151) Coordinator: A. Eliopoulos Funding Agency: European Commission (FP7) Total Budget: €12,000,000 Budget for my team: €1,000,000 Duration: 01/01/2009 – 31/12/2012 (4 έτη) Note: INFLA-CARE received the highest score among more than 100 proposals on cancer-related research in the second round of 2008 applications.

Title: Apotherapy: CD40 ligand-based modalities for the treatment of solid tumours. Coordinator: A. Eliopoulos Funding Agency: European Commission (FP6) Total Budget: €1,900,000 Budget for my team: €457,740 Duration: 01/10/2006 - 30/09/2009

Title: Molecular Mechanisms regulating the sensitivity of carcinoma cells to CD40 ligand-induced apoptosis and the cross-talk with the integrin network.
Coordinator: A. Eliopoulos
Funding Agency: Association for International Cancer Research, UK

Total Budget: $\notin 122,130$ Budget for my team: $\notin 122,130$ Duration: 01/04/2006 - 30/03/2009Note: This proposal was one of 66 applications funded by AICR among 485 (success rate 13.6%).

Title: New technologies for the diagnosis of bladder cancer. Coordinator: Creta Interclinic Hospital Funding Agency: General Secretariat of Research & Technology of Greece Total Budget: €120,000 Budget for my team: €10,000 (+ELISA plate reader) Duration: 16/10/2006 – 15/06/2008

Title: *The CD40 pathway in carcinomas: regulation of apoptosis and therapeutic application.* **Coordinator:** A. Eliopoulos

Funding Agency: Cancer Research UK **Total Budget:** £ 240,000 (approx. €260,000) **Budget for my team:** £ 240,000 (approx. €260,000) **Duration:** 01/07/2004 – 30/06/2007

Title: The role of Epstein-Barr virus-encoded latent genes in the pathogenesis of virusassociated tumours. Coordinator: L.S.Young Funding Agency: Cancer Research UK Total Budget: \pounds 900,000 (approx. €1,150,000) Budget for my team: approx. €150,000) Duration: 01/05/2005 – 30/12/2010

Title: *Identification and characterisation of signal transduction pathways activated by EBV-encoded latent membrane protein-1.*

Coordinator: A. Eliopoulos Funding Agency: MRC Career Development Award, UK Total Budget: £ 312,000 (approx. €330,000) Budget for my team: approx. €330,000 Duration: 01/10/2000 – 30/09/2004

Title: The CD40 pathway in carcinomas: characterisation of pro-apoptotic pathways identifies novel therapeutic opportunities. Coordinator: A. Eliopoulos Funding Agency: Cancer Research UK Total Budget: £ 200,000 (approx. €220,000) Budget for my team: £ 200,000 (approx. €220,000)

Duration: 01/07/2001 - 30/08/2004

Title: Expression and function of the novel TNF receptor TRADE and its ligand in the human liver. Coordinator: S.C. Afford Funding Agency: Genetics Institute, USA Total Budget: \$ 85,000 Budget for my team: approx. \$ 15,000 Duration: 01/03/2001 – 27/02/2003

Title: The role of CD40 in carcinomas. Coordinator: L.S.Young Funding Agency: Cancer Research UK Total Budget: £ 170,000 (approx. €200,000) Budget for my team: approx. €100,000 Duration: 01/07/1998 – 30/06/2001

Title: *Identification of genes activated by CD40 and its C-terminus-interacting protein, TRAF3.*

Coordinator: A. Eliopoulos Funding Agency: University of Birmingham Medical School Faculty Research Grant. Total Budget: £ 2,000 (approx. €2,400) Budget for my team: approx. €2,400 Duration: 1999

Title: Regulation of CD40 and LMP1 signalling by interleukin 6. Coordinator: A. Eliopoulos Funding Agency: University of Birmingham Medical School Faculty Research Grant/ E.B. Jones Bequest Total Budget: £ 2,500 (approx. €3,000) Budget for my team: approx. €3,000 Duration: 1998

X . INVITATIONS FOR SEMINARS

- Oct. 2015: 'Apolipoprotein A-I: a novel regulator of colitis and inflammation-associated colon cancer'.
 Institute for Research in Biomedicine, Barcelona, Spain. Host: Dr Angel Nebreda.
- Oct. 2014: 'Molecular networks that confer resistance to experimental colitis-associated colon cancer'.
 University of Rijeka School of Medicine, Croatia. Host: Prof. Sinisa Volarevic.
- May 2014: 'Go with your gut: Molecular networks that confer resistance to experimental colitis-associated colon cancer'. CERTH, Thessaloniki, Greece. Host: Prof. Kostas Stamatopoulos, Director.
- June 2013: '*The TPL-2 kinase is a suppressor of lung carcinogenesis*'. National Institute for Medical Research, London, UK. Host: Dr Steve Ley.
- March 2013: 'Understanding apoptotic pathways for the rational design of anti-cancer therapies".
 University of Crete, Department of Chemistry Colloqium. Host: Assoc. Prof. Ioulia Smonou.
- Feb. 2013: 'The TPL-2 kinase is a suppressor of lung carcinogenesis'.Gray Institute for Radiation Oncology & Biology 2013 Seminar Series, Oxford University, UK. Host: Dr Madalena Tarsunas.
- Feb. 2013: 'The TPL-2 kinase is a suppressor of lung carcinogenesis'.Institute for Biomedical Research, The University of Birmingham, UK. Host: Dr Jorge Caamano.
- June 2012: 'The CD40 pathway in carcinomas: harnessing signal transduction for tumor therapy.'
 Roche Glycart AG, Zurich, Switzerland. Host: Drs. V. Karanikas & V. Levitsky.
- Feb. 2012: *'The pro-inflammatory Tpl2 kinase functions as a lung tumor suppressor'*. Institute Gustav-Roussy, Paris, France. Host: Prof. L. Zitvogel.
- July 2011: 'A novel role for the Tpl2 kinase in lung cancer'.The University of Liverpool, Institute for Cancer Studies, Liverpool, UK. Host: Dr. T. Liloglou.
- June 2011: 'The Janus faces of Tpl2 kinase in inflammation and cancer'.

The University of Vienna, Max F. Perutz Laboratories, Vienna, Austria. Host: Prof. M. Baccarini.

- July 2010: 'Translational cancer research: Harnessing basic science for patient and public benefit'.
 The University of Rijeka School of Medicine, Croatia. Host: Prof. S. Volarevic.
- April 2010: 'The CD40 pathway in carcinomas: harnessing signal transduction for tumor therapy.'
 University of Cyprus, Department of Biology. Host: Dr Katerina Strati.
- Dec. 2006: '*Exploiting the CD40 receptor signaling pathways for cancer therapy*' The University of Uppsala, Sweden. Host: Dr A. Loskog
- Dec. 2006: '*Exploiting the CD40 receptor signaling pathways for cancer therapy*' Εθνικό Ιδρυμα Ερευνών, Αθήνα. Host: Δρ Alex Pintzas.
- May 2004: '*CD40 and CD40 ligand: in sickness and in health, in life and death*' The University of Southampton Medical School. Host: Prof. C. Mann.
- Sept. 2003: "*CD40 signaling and function*" The University of Cardiff College of Medicine. Host: Dr S. Man.
- June 2003: "*CD40 signaling and function*" Cardiovascular Institute, Boston University, Boston USA. Host: Prof. V. Zannis.
- May 2003: '*TNF receptors and LMP1: viral mimicry of cellular pathways*' Molecular Oncology Research Institute, Tufts-NEMC, Boston, USA. Host: Prof. P. Tsichlis.
- Feb. 2003: '*CD40 signaling and viral mimicry*'. The University of Birmingham, Department of Surgery. Host: Dr C. Tselepis.
- Oct. 2002: '*CD40 signaling and function*' The University of Southampton, Cancer Sciences Division. Host: Dr G. Packham.
- Oct. 1997: 'Regulation of intracellular signaling by the oncogenic EBV-encoded latent membrane protein 1'
 The University of Nottingham, School of Biomedical Sciences. Host: Prof. P. Shaw.
- Sept. 1996: '*Regulation of apoptosis and drug resistance by Bcl-2 family members*'. The University of Bristol, Department of Pathology. Host: Dr A. Hague.

XI. INVITATIONS TO CONFERENCES AND SCIENTIFIC MEETINGS

	May 2015:	Signalling pathways regulating the pathogenic function of NKT cells. 5th Summer School of Immunology , May 18-22, Porto Heli, Greece.
	September 2014:	<i>TPL2 kinase is a suppressor of lung carcinogenesis.</i> FEBS-EMBO 2014 Conference, 30 August – 4 September 2014, Paris, France.
	May 2014:	<i>INFLA-CARE: Inflammation and Cancer Research in Europe.</i> 2014 Cancer Immunotherapy Conference, 6 – 8 May 2014, Mainz, Germany.
	April 2014:	Go with your gut: Molecular networks that confer resistance to experimental colitis-associated colon cancer. Oncogenic pathways and anti-tumor responses Symposium, 23-25 April 2014, Athens, Greece
	May 2013:	'A high-throughput methodology to identify markers for inflammation- associated colorectal carcinogenesis'. Challenges in Biomarker Discovery and Implementation Symposium, Athens, Greece May 10, 2013
	June 2011 :	<i>⁽Inflammation & Cancer'</i> 3rd Summer School of Immunology , Spetses, 27 June – 1 July 2011
	November 2011:	<i>'The CD40 receptor: from signalling pathways to cancer therapies'.</i> Workshop on "Translational Cancer Research ", 10-11 November 2011, Riejka Croatia.
	October 2010:	<i>'The Tpl2 kinase in inflammation and cancer'.</i> 62nd Conference of the Hellenic Society of Biochemistry and Molecular Biology , 15-17 October 2010, Alexandroupolis, Greece.
]	November 2009:	"The CD40 pathway in carcinomas: exploiting signal transduction pathways for cancer therapy". 1 st Conference of the Hellenic Association for Molecular Cancer Research, 27-29 November 2009, Athens.
	September 2009:	<i>'Inflammation & Cancer'</i> 2nd Immunology Summer School & Conference , Hellenic Academy of Immunology, Kefalonia, Greece
	July 2008:	"The CD40 pathway in carcinomas: harnessing signal transduction

	for tumor therapy". 3rd Workshop Molecular Targets for Cancer , Bergen, Norway. Invited by Directorate F – Health of the European Commission.
April 2008:	"MicroRNA circuits in breast cancer". 4 th International Workshop on Molecular Pathology, 25-26 Απριλίου 2008, Olomouc, Τσεχία. Invited by the Dean of the University Palacky Olomouc.
March 2008:	"The CD40 pathway in carcinomas: from signal transduction pathways to cancer therapy". 13 th Hellenic Symposium of Pharmacological Chemistry, Athens, 14-15 March 2008.
October 2008:	'The CD40 pathway in carcinomas: from signal transduction pathways to cancer therapy'. Marie Curie TOK programme "SUPRAGENE", National Hellenic Research Foundation, Athens.

XII . BRIEF DESCRIPTION OF CURRENT RESEARCH ACTIVITIES

Cancer is a complex disease which is often characterized by deregulated intracellular signal transduction. Currently, my laboratory engages in characterizing the role of inflammatory signalling pathways in carcinogenesis.

Epidemiological, clinical and experimental data suggest that a number of human malignancies can be attributed to toxic agents and irritants or to persistent infections of viral or bacterial etiology which cause chronic inflammatory imbalance in the affected tissue. We utilize chemical-induced carcinogenesis protocols in animal models to dissect the role of the various cell types present in the tumor and analyze the signals exchanged between these cells with emphasis on the TPL2 kinase. The practical benefits of this research will assist in the improved design of novel anticancer therapeutics and diagnostic tools to address prevention, early detection and improved management of human cancer.

Of particular interest are studies in colitis-associated colon cancer which allowed us to identify pathways related to lipid metabolism mediating resistance to the disease. We will further explore the intracellular and extracellular roles of key proteins that regulate these pathways, such as apolipoproteins, in disease pathogenesis using mouse and Drosophila models and cell lines.

PUBLICATIONS IN PEER-REVIEW JOURNALS

- **P-94.* Vyrla D, Nikolaidis G, Oakley F, Perugorria MJ, Tsichlis PN, Mann DA and <u>Eliopoulos</u> <u>AG</u>: TPL2 kinase regulates Natural Killer T cell function in inflammatory liver disease. (*Submitted*).
- *P-93. Gkouskou KK, Ioannou M, Pavlopoulos GA, Georgila K, Siganou A, Nikolaidis G, Kanellis DC, Moore S, Papadakis KA, Kardassis D, Iliopoulos I, McDyer FA, Drakos E and <u>Eliopoulos AG</u>: Apolipoprotein A-I inhibits experimental colitis and colitis-propelled carcinogenesis. (*in press*).
- **P-92.** Panagi M, Georgila K, <u>Eliopoulos AG</u> and Apidianakis Y: Constructing the intestinal holo'ome of inflammation-driven cancer: from flies and mice to humans. (*Review article;* **Submitted**).
- *P-91.* Doxaki C, Kampranis S, <u>Eliopoulos AG</u>, Spilianakis C and Tsatsanis C: Coordinated regulation of miR-155 and miR-146a genes during induction of endotoxin tolerance in macrophages. *J. Immunol. (accepted for publication).*
- **P-90.* Kanellis DC, Bursac S, Tsichlis PN, Volarevic S, <u>Eliopoulos AG</u>: Physical and functional interaction of the TPL2 kinase with nucleophosmin. *Oncogene 2015; 34(19):2516-26.*
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CHAPTERS IN TEXTBOOKS

- B-01. Loskog A and <u>Eliopoulos AG</u>: CD40 Ligand-based Cancer Therapy.
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- B-02. Virla D, Tsatsanis C & <u>Eliopoulos AG</u>: TPL2.
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BIBLIOMETRIC DATA

Number of Publications	94
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PATENTS

Tsichlis Philip; Dumitu Calin Dan; Eliopoulos Aristides G : Modulation of prostaglandin synthesis and cancer growth. US2004126823 (2004)

The present invention discloses novel methods to identify compounds potentially useful for the treatment and prevention of inflammation and/or cancer in animals including mammals. It disclose that Tpl2 is required for tumor induction by Akt and Tpl2 is required for the induction of cyclo-oxygenase-2 (COX-2) and prostaglandin synthesis and provides methods to identify compounds that modulate interactions between Tpl-2 and COX-2 or interactions between Tpl-2 and Akt. The present invention also discloses a transgenic Tpl2-/- mouse encoding Akt where the mouse is characterized by its ability to show delayed tumor induction by comparison with a transgenic Tpl2+/+ mouse expressing the Akt and method of treating cancers in animals.

INDICATIVE PARTICIPATIONS TO CONFERENCES

C-18. A. Eliopoulos: "TPL2 kinase is a suppressor of lung carcinogenesis". (*Invited* speaker).

FEBS-EMBO 2014 Conference, 30 August – 4 September 2014, Paris, France.

- C-17. M. Vouyoukalaki, S. Gialessaki* & A. Eliopoulos : 'Quantitative changes in Focal Adhesion Kinase regulate secretory signaling for cell survival'.
 640 Conference of the Hellenic Society of Biochemistry and Molecular Biology, Athens 6-8 December 2013.
 *Best poster Award
- C-16. A. Eliopoulos: 'A high-throughput methodology to identify markers for inflammationassociated colorectal carcinogenesis'. (*Invited speaker*). *Challenges in Biomarker Discovery and Implementation* Athens, Greece May 10, 2013.
- C-15. A. Eliopoulos: 'The TPL2 kinase is a suppressor of lung carcinogenesis' *The Biochemistry, Biology and Pathology of MAP Kinases,* Ma'ale Hachamisha, Jerusalem Hills, Israel 14-18 October, 2012
- C-14. A. Eliopoulos: 'The CD40 pathway in carcinomas: harnessing signal transduction for tumor therapy'. (*Invited speaker by the EC, Directorate F Health*)
 3rd Workshop Molecular Targets for Cancer, Bergen, Norway, 2009.
- **C-13.** Moschonas A, Kouraki M, Knox PG, Thymiakou E, Kardassis D & Eliopoulos AG: 'CD40 induces antigen transporter and immunoproteasome gene expression in carcinomas via the coordinated action of NF-κB and of NF-κB mediated *de novo* synthesis of IRF-1'. (*Poster*)

33rd FEBS Congress and 11th IUBMB Conference: Biochemistry of Cell Regulation, 28 June - 3 July 2008, Athens.

C-12. A. Eliopoulos: 'microRNA circuits in breast cancer'.

4th International Workshop on Molecular Pathology, April 25-26, 2008, Olomouc, Czech Republic (<u>invited speaker</u> by the Dean of the Faculty of Medicine and Dentistry of the Palacky University of Olomouc).

- C-11. A. Eliopoulos: 'The CD40 pathway in carcinomas: from signal transduction pathways to cancer therapy'. (*Invited speaker*)
 13° Hellenic Symposium of PharmacoChemistry, 14-15 March 2008, Athens.
- **C-10.** Moschonas A, Kouraki M, Knox PG, Thymiakou E, Kardassis D & Eliopoulos AG: 'CD40-induced NF-κB signals stimulate de novo synthesis of the transcription factor IRF- 1 which cooperates with NF-κB in the regulation of transporter for antigen processing (TAP1) expression'. (<u>Poster</u>)

59° Conference of the Hellenic Society of Biochemistry and Molecular Biology, 7-9 December 2007, Athens.

- C-9. Eliopoulos AG. 'Apotherapy: CD40 ligand-based modalities for the treatment of solid tumors'. (*Poster*)
 Second Workshop on Molecular Targets for Cancer (organized by the European Commission), September 28-29, 2007, Luxembourg.
- C-8. <u>Eliopoulos AG</u>, Davies C. 'Inhibition of the PI3 kinase and ERK MAPK pathways unveils the pro-apoptotic properties of CD40 ligation in carcinoma cells: implications for cancer therapy'. (*oral presentation*) *Apoptosis in Cancer and Infection*, October 6-9, 2002, Capri, Italy.
- C-7. <u>Eliopoulos AG</u>, Tsichlis PN, Young LS. 'The protein kinase Tpl2/Cot regulates LMP1 JNK and NF-κB signaling downstream of TRADD/TRAF2'. (*oral presentation*) The 9th Biennial conference of the International Association for Research on Epstein-Barr virus and associated diseases. June 22-27, 2000, Yale University, Connecticut, USA.
- C-6. <u>Eliopoulos AG</u>, Koffa M., Kerr DJ and Young LS. 'Mitochondrial control of apoptosis in ovarian carcinoma cells'. (*Poster*)
 39th Annual Meeting of the British Association for Cancer Research, June 21-24, 1998, Dublin, Ireland. (*Abstract published in Brit. J. Cancer*, 78 (suppl I): 25, 1998).
- C-5. <u>Eliopoulos AG</u>, Blake SMS, Young LS. TRADD associates with the extreme C-terminus of the EBV-encoded Latent Membrane Protein 1 (LMP1) and mediates activation of the NF-κB and JNK pathways. (*Poster*)
 Genes and Cancer, Molecular Biology and Cancer Network, December 8-10, 1997, Warwick, UK.
- C-4. <u>Eliopoulos AG</u>, Dawson CW, Armitage RJ, Wakelam MJO, Young LS. CD40 ligation, a survival signal in B cells, potentiates epithelial cell apoptosis. (*Poster*)
 Cold Spring Harbor meeting on Programmed Cell Death, September 20-24, 1995, NY, USA.
- C-3. <u>Eliopoulos AG</u>, Dawson CW, Wakelam MJO and Young LS: 'CD40 stimulation augments apoptosis in carcinoma cell lines'. (*Poster*)

Keystone Symposia on Apoptosis (Programmed Cell Death), March 5-11, 1995, Colorado, USA.

- C-2. <u>Eliopoulos AG</u>, Kerr DJ, Young LS. A role for the bcl-2 oncogene in cis-platin resistance in ovarian cancer. (*Poster*)
 35th Annual Meeting of the British Association for Cancer Research, 27th-30th March 1994, Birmingham, UK. (Abstract published in Brit. J. Cancer, 69 (suppl XXI): 52, 1994).
- **C-1**. <u>Eliopoulos AG</u>, Spandidos DA and Eliopoulos G. Increased binding of AP-1 protein to a Negative Regulatory Element contributes to down regulation of *c-myc* during the late stages of erythroleukemic differentiation. (*Poster*)

8th Symposium on Molecular Biology of Hematopoiesis, July 9-13, 1993, Basel, Switzerland.

DISSEMINATION TO THE PUBLIC DOMAIN

1. Interview by the newspaper "Eleytherotypia of Sunday", 24 Δεκεμβρίου 2010, about my laboratory's work on CD40 receptor.

http://mcb.med.uoc.gr/arxeia2/arthro-eleytherotypia.jpg

2. Presentation of the EC-funded program *INFLA-CARE* in the popular R&D journal "Research & Innovation" of the National Documentation Centre, Issue 73, July-August 2009. <u>http://www.ekt.gr/content/display?ses_mode=rnd&ses_lang=en&prnbr=77341</u> <u>http://www.ekt.gr/content/display?ses_mode=rnd&ses_lang=el&prnbr=77341</u>

3. Interview about the EC-funded program *Apotherapy* by the magazine 'Chimica Chronicles'

http://mcb.med.uoc.gr/mysite/arxeia/news-and-views/2007-05-01 chimica chronica magazine.pdf

4. Interview about the EC-funded program *Apotherapy* by the newspaper 'Imerisia', 11 January 2007.

http://mcb.med.uoc.gr/mysite/photos/news-views_aris-imerisia.jpg

of the Hellenic Association of Chemists, Issue 4, May 2007.

5. Interview about the EC-funded program *Apotherapy* by journalists of Cordis, the official website of the European Commission in relation to Research & Development, October 2006.

http://cordis.europa.eu/news/rcn/26926_en.html

6. Presentation of the EC-funded program *Apotherapy* in the popular R&D journal "Research & Innovation" of the National Documentation Centre, December 2006.

http://www.ekt.gr/content/display?ses_mode=rnd&ses_lang=el&prnbr=69744

7. Interview about the EC-funded program *Apotherapy* by the local newspaper 'Patris' with first page coverage, issue 18005, 10 January 2007.

BRIEF DESCRIPTION OF UNDERGRADUATE TEACHING RESPONSIBILITIES

My contribution to the undergraduate course '**Biology**' of the 1st semester of the University of Crete Medical School curriculum addresses the following thematic areas:

- Proteins: structure & function
- DNA structure, replication
- DNA mutations and mechanisms of repair of DNA damage.
- RNAs and basic mechanisms of transcription
- Transcription factors and transcriptional regulation.
- Translation (protein synthesis and mechanisms of protein turnover- proteasome, autophagy).
- Viruses and transposable elements
- Signal transduction
- Cell cycle / mitosis / meiosis
- Mechanisms of Cell Death
- The cancer cell
- Technologies in molecular and cellular biology

Students are taught fundamental aspects of cellular and molecular biology under the prism of medical sciences. Selected human diseases with defined molecular basis are described and linked to biological processes; for example ribosomopathies are used to describe ribosome structure, dynamics and function. Teaching material is available to students on a dedicated teaching link of the Medical School (<u>http://vml.med.uoc.gr</u>).

In 2008, I introduced to the 'Biology' course a 2-hour presentation on the use of PubMed and related databases for the retrieval of reliable scientific information by the students. These lectures are given by Dr Ioannis Iliopoulos, Assistant Professor of Bioinformatics in the Division of Basic Sciences and is regarded as a highly successful initiative with long-term benefits to our students.

Additionally, the tutors of the course have devoted three 2-hour lectures to the biology of cancer (A Eliopoulos), neural (D Karagogeos) and stem (E. Papadaki) cell aiming to integrate prior knowledge of macromolecule function to the pathophysiology of human diseases.

During the academic years 2005-2006 and 2006-2007 I served as tutor and coordinator of the 2^{nd} semester undergraduate course '**Medical Genetics**' and since 2008 I contribute to the evaluation of students' paper presentations in the context of the undergraduate course '**Molecular Medicine**' of the 5th semester.

INDICATIVE EVALUATIONS OF THE POST-GRADUATE COURSE "MALIGNANT DISEASES".

Evaluation of course "Malignant Diseases", Academic Year 2009-2010

The overall evaluation of the course is that it was very interesting, well structured, stimulating and original. We concluded that it is a good idea of the course to keep approximately this form.

More specifically, 100% considered the instructors very interesting, helpful and explanatory (grade 4-5), and considered the material presented in a pretty clear and organized way (50% with 4 and 50% with 5). We generally thought lectures and discussion very valuable (50% graded with 4, 50% with 5), and that the course increased significantly our ability to understand, think and write about Malignant diseases (50% graded with 4, 50% with 5). About the instructors, they were all graded highly (4-5).

The only thing that we could comment more specifically is that we would like to have more discussions over specific diseases (like Professor Papadaki's lecture). Generally, this may have been the most well-organized course.

Evaluation of course "Malignant Diseases", Academic Year 2010-2011

The overall evaluation of the course is that it was very stimulating, well organized, the information given was very valuable and the instructors were excellent. We concluded that this course should keep approximately this form with some small changes.

Specifically, we considered the instructors very interesting, helpful and explanatory (100% graded with 5) and we considered that the material presented in a pretty clear and organized way (83,3% graded with 5 and 16,6% graded with 4). We generally thought lectures and discussion very valuable (lectures: 100% graded with 5, discussion: 83,3% graded with 5 and 16,6% graded with 4), and that the course increased significantly our ability to understand, think and write about Malignant Diseases (understanding, thinking: 100% graded with 5, writing: 83,3% graded with 5, 16,6% graded with 4). All the instructors were graded highly (grade 5).

Dr. Tsatsanis was kind enough to give us an original article for discussion after our recommendation (this paper discussion was not on the schedule) and we found this very useful and we recommend paper discussions to be introduced in a weekly basis to this course and to other courses too. Furthermore, the lectures of Dr. A. Eliopoulos and Professor H. Papadaki were especially good (very clear, concise, well-organized and well-presented).

The examination was based on the lectures and on an original article too. Some of us found the examination very long and the most challenging of the graduate program. Generally this course was very useful and interesting and it introduced the students in the fundamentals of cancer and malignant diseases.