

**THEODORE FOTSIS****1. EDUCATION**

- 01.09.68 - 31.10.1974 Studies at the Medical School of the University of Athens. Graduation with a "Very Good" grade.
- 18.01.1988 Obtaining the specialty of Clinical Chemistry from the General Directorate of Medical Affairs of Finland.
- 30.08.1988 Obtaining the title of Doctor of Medicine from the University of Helsinki with the thesis "Metabolic profiling of estrogens by ion exchange chromatography and gas chromatography – mass spectrometry".

**2 ACADEMIC AND PROFESSIONAL CAREER**

- 30.04.1975 License to practice medicine in Greece.
- 20.06.1975 - 20.06.1976 Medical doctor in the rural clinic of Ano Korakiana, Corfu
- 16.10.1976 - 17.06.1977 Training physician at the Public Hospital of Infectious Diseases of Athens..
- 01.12.1977 - 15.09.1986 Postgraduate researcher and training physician at the Department of Clinical Chemistry, University Hospital, University of Helsinki, Finland..
- 13.10.1986 - 31.03.1987 Clinical work at the Medical Center of Pohjois Haaga, Helsinki.
- 01.04.1987 - 17.05.1987 Specialist physician at the Department of Clinical Chemistry, Helsinki University Hospital, replacing the absent holder of the position.
- 15.09.1987 - 27.06.1989 Researcher in the Department of Microbiology at the University of Galway, Ireland in the laboratory of Prof. Frank Gannon with a two-year scholarship from the Directorate of Biotechnology of the European Union.
- 28.06.1989 - 27.06.1999 Researcher in the field of Oncology and Hematology of the Pediatric Clinic of the University of Heidelberg, Laboratory of Angiogenesis.
- 28.06.1994 - 31.12.1995 Researcher of the German Cancer Research Center (DKFZ) in the Cytogenetics Laboratory.
- 07.11.1995 - 20.07.2001 Associate Professor at the Biological Chemistry Laboratory of the Medical School of the University of Ioannina.
- 20.07.2001 – 31.08.2019 Professor at the Biological Chemistry Laboratory of the Medical School of the University of Ioannina.
- 01.09.2001 - 31.03.2007 Director of the Biological Chemistry Laboratory of the Medical School of the University of Ioannina.
- 10.05.2004 - 16.4.2005 Deputy Director of FORTH/BRI
- 16.04.2005 - 17.12.2006 Acting Director of FORTH/BRI.
- 18.12.2006 - 29.02.2012 Director of FORTH/BRI.
- 01.03.2012 - 31.08.2019 Head of FORTH/IMBB-BR (BRI merged with IMBB)
- 13.10.2019 Announcement and award of the title "Distinguished member of FORTH"
- 19.12.2019 Award of the title of Emeritus Professor of the University of Ioannina

**3. EDUCATIONAL WORK (at the University of Ioannina)****3.1 Teaching**

- 1995 – 2012 Teaching the Biochemistry II course to the undergraduate students of the Medical School of the University of Ioannina.
- 1995 - 2019 Practical training of Biochemistry I course for the undergraduate medical students of the University of Ioannina.
- 1998 – 2007 Head and teaching of the Molecular Genetics course of the Elective Study Program (PSE) "Biochemistry" of the University of Ioannina.
- 1999 - 2017 Head and teaching of the Molecular Oncology course of the Biotechnology Graduate Program of the Medical School of the University of Ioannina.
- 1999 – 2007 Internship for the students of the Biotechnology Graduate Program of the Medical School of the University of Ioannina.
- 2001 - 2007 Head of the Biochemistry I and II courses at the Medical School of the University of Ioannina.

2012 - 2019 Teaching the Biochemistry I course to the undergraduate students of the Medical School of the University of Ioannina

### 3.2 Organisation of educational programs

- Member of the editorial committee of the proposal for the financing of the Postgraduate Studies Program (MSP) in Biotechnology from the EPEAEK of the Ministry of Education (budget 260 million drachmas = 763.022 euros). Vice-Dean of PMS Biotechnology and member of the Coordinating Committee.
- Member of the editorial committee of the proposal for the financing of the Elective Study Program (EPS) "Biochemistry" by the EPEAEK of the Ministry of Education (budget 320 million drachmas = 939.105 euros). Dean of the PSE "Biochemistry" and member of the Study Committee.

### 4. ORGANISATIONAL-ADMINISTRATIVE WORK

- Principal investigator in a number of competitive research programs.
- Vice-dean of the "Biotechnology" Graduate Program of the University of Ioannina.
- Dean of the Biochemistry Elective Program (PSE) of the University of Ioannina.
- Director of the Laboratory of Biological Chemistry of the School of Medicine of the University of Ioannina.
- National representative in EMBO/EMBC and H2020 Health, demographic change and wellbeing
- Member of the National Research and Technology Council (ESET)
- Regular member of TES Biosciences
- Director of FORTH/BRI and Head of FORTH/IMBB-BR

### 5. SCHOLARSHIPS-AWARDS

31.10.1974 Recitation of the Hippocratic Oath as having the highest degree among the graduates during the swearing-in of the October term – IKY Scholarship due to performance in the courses.

31.10. 1995 Gerhard– Domagk-Preis Clinical and Experimental Oncology Research Award (Germany). The award was given for the paper "The endogenous oestrogen metabolite 2-methoxyestradiol inhibits angiogenesis and suppress tumor growth" which was published in Nature 368:237-239, 1994.

2004 - 2010 National Representative at EMBO/EMBC

2005 - 2007 Member of the National Council for Research and Technology (ESET)

2008 - 2010 National Representative in the EU FP7-Health

2010 - 2014 Regular Member of TES Biosciences

2014 - 2019 National Representative to the European Union Commission Horizon 2020 on the topic "Health, demographic change and well-being"

### 6. FUNDING (2008 - 2023)

EUROPEAN UNION	ACRONYM	TOTAL	BRI	Start	End
FP6	<i>EndoTrack</i>	10.864.508	1.045.758	01.02.2006	31.07.2010
FP7 (Marie Curie) PEOPLE	<i>EPIGBRCASTEM</i>	100.000	100.000	01.03.2012	29.02.2016
<b>NSRF</b>					
InterregV-A "Greece-Italy 2014-2020"	<i>Silver Wellbeing</i>	845.313	158.619	31.05.2018	30.05.2020
REGION of EPIRUS	<i>Microscopy unit</i>	800.000	800.000	15.06.2010	15.10.2010
NEW KNOWLEDGE	<i>ACL</i>	147.922	147.922	01.08.2011	31.05.2014
PRESEARCH-CREATE-INNOVATE	<i>PANTHER</i>	1.000.000	200.000	15.04.2021	14.10.2023
<b>GSRT</b>					
PENED	<i>03EΔ 645</i>	198.088	199.088	01.07.2007	30.06.2009
PENED	<i>03EΔ 688</i>	180.000	180.000	15.12.2015	14.12.2008
COOPERATION	<i>POM</i>	1.962.900	189.000	16.12.2010	15.03.2015
COOPERATION	<i>NoisePlus</i>	1.680.00	445.000	24.10.2012	31.10.2015
SUPPORT of POSTDOCTORAL RESEARCHERS	<i>BRUKBBMSC</i>	150.000	150.000	06.12.2011	05.12.2013
SUPPORT of POSTDOCTORAL RESEARCHERS	<i>ReVaReSC</i>	150.000	150.000	14.06.2012	13.06.2015
KRHPIS	<i>BIOSYS</i>	1.580.000	300.000	01.07.2013	31.12.2015
THALIS	<i>AdiSC</i>	599.400	599.400	01.06.2012	31.12.2015
THALIS	<i>StemCycle</i>	600.000	170.000	01.02.2012	30.05.2015
KRHPIS II	<i>BITHP</i>	2.319.500	600.000	08.09.2017	07.09.2020
INFRASTRUCTURES	<i>BIOIMAGING</i>	4.000.000	204.500	31.10.2017	30.10.2020
<b>OTHER</b>					
GSRT/IKY/ZIEMENS	<i>Biology-Biophotonics</i>	1.580.000	120.000	01.01.2014	31.12.2016
FORTH SYNERRGY GRANT	<i>NEUROPHENE</i>	80.000	60.000		
		<b>27.157.631</b>	<b>5.819.287</b>		

## 7. RESEARCH WORK

My overall research work has been published in **102 original articles** in international peer-reviewed journals and **9** book publications. Also, about **200 abstracts** of conference papers, many of which I was a speaker, have been published. The 102 original international publications have received 15,854 citations and the 9 articles in books 273 citations. Thus, the total research work has received **16,127** references (Google Scholar). This means that on average each original publication is cited  $15,854/102 = 155.4$  times. The h index is **53**.

1. Adlercreutz, H., Martin, F., Järvenpää, P., and Fotsis, T. Steroid adsorption and enterohepatic recycling. **Contraception** 1979, 20: 201-223.
2. Järvenpää, P., Fotsis, T., and Adlercreutz, H. Ion exchange purification of estrogens. **J. Steroid Biochem.** 1979, 11: 1583-1588.
3. Fotsis, T., Järvenpää, P., and Adlercreutz, H. Purification of urine for quantification of the complete estrogen profile. **J. Steroid Biochem.** 1980, 12: 503-508.
4. Järvenpää, P., Kosunen, T., Fotsis, T., and Adlercreutz, H. In vitro metabolism of estrogens by isolated intestinal micro-organisms and by human fecal microflora. **J. Steroid Biochem.** 1980, 13: 345-349.
5. Fotsis, T., Järvenpää, P., and Adlercreutz, H.: Identification of 4-hydroxyestriol in pregnancy urine. **J. Clin. Endocrinol. Metab.** 1980, 51: 148-151.
6. Fotsis, T., Adlercreutz, H., Järvenpää, P., Setchell, K.D.R., Axelson, M., and Sjövall, J. Group separation of steroid conjugates by DEAE-Sephadex anion exchange chromatography. **J. Steroid Biochem.** 1981, 14: 457-463.
7. Heikkinen, R., Fotsis, T., and Adlercreutz, H. Reversed phase C18 cartridge for extraction of estrogens from urine and plasma. **Clin. Chem.** 1981, 27: 1186-1189.
8. Adlercreutz, H., Fotsis, T., Heikkinen, R., Dwyer, J.T., Goldin, B.R., Gorbach, S.L., Lawson, A.M., and Setchell, K.D.R. Diet and urinary excretion of lignans in female subjects. **Medical Biology** 1981, 59: 259-261.
9. Fotsis, T., Heikkinen, R., Adlercreutz, H., Axelson, M., and Setchell, K.D.R. Capillary gas chromatographic method for the analysis of lignans in human urine. **Clin. Chim. Acta** 1982, 121: 361-371.
10. Adlercreutz, H., Fotsis, T., Heikkinen, R., Dwyer, J.T., Woods, M., Goldin, B.R., and Gorbach, S.L.. Excretion of the lignans, enterolactone and enterodiol, and of equol in omnivorous and vegetarian postmenopausal women and in breast cancer. **Lancet** 1982, 2: 1295-1299.
11. Fotsis, T., and Heikkinen, R. Selective chromatographic fractionation of catechol estrogens on anion exchangers in borate form. **J. Steroid Biochem.** 1983, 18: 357-363.
12. Heikkinen, R., Fotsis, T., and Adlercreutz, H. Use of ion exchange chromatography in steroid analysis. **J. Steroid Biochem.** 1983, 19: 175-180.
13. Antila, E., Fotsis, T., Wartiovaara, J., and Adlercreutz, H. Steroid metabolism in human teratocarcinoma cell line PA1. **J. Steroid Biochem.** 1983, 19: 1583-1590.
14. Bannwart, C., Fotsis, T., Heikkinen, R., and Adlercreutz, H. Identification of the isoflavonic phytoestrogen daidzeinin human urine. **Clin. Chim. Acta** 1984, 136: 165-172.
15. Hämäläinen, E.K., Fotsis, T., and Adlercreutz, H. Rapid and reliable separation of 5 $\alpha$ -dihydrotestosterone from testosterone on silica gel microcolumns. **Clin. Chim. Acta** 1984, 139: 173-177.
16. Bannwart, C., Adlercreutz, H., Fotsis, T., Wähälä, K., Hase, T., and Brunow, G. Identification of O-desmethylangolesin, a metabolite of daidzein, and of metairesinol, one likely plant precursor of the animal lignan enterolactone, in human urine. **Finn. Chem. Lett.** 1984, 45: 120-125.
17. Adlercreutz, H., Fotsis, T., Bannwart, C., Hämäläinen, E.K., Bloigu, S., and Ollus, A. Urinary estrogen profile determination in young Finnish vegetarian and omnivorous women. **J. Steroid Biochem.** 1986, 24: 289-296.
18. Adlercreutz, H., Musey, P.I., Fotsis, T., Bannwart, C., Wähälä, K., Mäkelä, T., Brunow, G., and Hase, T. Identification of lignans and phytoestrogens in urine of chimpanzees. **Clin. Chim. Acta** 1986, 158: 147-154.
19. Korpela, J.T., Fotsis, T., and Adlercreutz, H. Multicomponent analysis of bile acids in faeces by anion exchange and capillary column gas-liquid chromatography; application in oxytetracycline treated subjects. **J. Steroid Biochem.** 1986, 25: 277-284.
20. Adlercreutz, H., Fotsis, T., Bannwart, C., Wähälä, K., Mäkelä, T., Brunow, G., and Hase, T. Determination of urinary lignans and phytoestrogen metabolites, potential antiestrogens and anticarcinogens, in urine of women on various habitual diets. **J. Steroid Biochem.** 1986, 25: 791-797.
21. Murphy, C., Fotsis, T., Pantzar, P., Adlercreutz, H., and Martin, F. Analysis of tamoxifen and its metabolites in human plasma by gas chromatography-mass spectrometry (GC-MS) using selected ion monitoring (SIM). **J. Steroid Biochem.** 1987, 26: 547-555.

22. Adlercreutz, H., Höckerstedt, K., Bannwart, C., Bloigu, S., Hämäläinen, E., Fotsis, T., and Ollus, A. Effect of dietary components, including lignans and phytoestrogens, on enterohepatic circulation and liver metabolism of estrogens and on sex hormone binding globulin (SHBG). **J. Steroid Biochem.** 1987, 27: 1135-1144.
23. Fotsis, T., Shah, H.P., Härkönen, M., and Adlercreutz, H. Fluoroenzymatic cycling assay (FECA) for the determination of catechol estrogen monomethyl ethers in human urine. **Neurochemical Research** 1987, 12: 507-513.
24. Fotsis, T., and Adlercreutz, H. The multicomponent analysis of estrogens in urine by ion exchange chromatography and GC-MS -I. Quantitation of estrogens after initial hydrolysis of conjugates. **J. Steroid Biochem.** 1987, 28: 203-213.
25. Fotsis, T. The multicomponent analysis of estrogens in urine by ion exchange chromatography and GC-MS -II. Fractionation and quantitation of the main groups of estrogen conjugates. **J. Steroid Biochem.** 1987, 28: 215-226.
26. Murphy, C., Fotsis, T., Adlercreutz, H., and Martin, F. Analysis of tamoxifen and 4-hydroxytamoxifen levels in immature rat uterine cytoplasm and KCL-nuclear extracts by gas chromatography-mass spectrometry (GC-MS) using selected ion monitoring (SIM). **J. Steroid Biochem.** 1987, 28: 289-299.
27. Murphy, C., Fotsis, T., Pantzar, P., Adlercreutz, H., and Martin, F. Analysis of tamoxifen, N-desmethyltamoxifen and 4-hydroxytamoxifen levels in cytosol and KCl-nuclear extracts of breast tumours from tamoxifen treated patients by gas chromatography-mass spectrometry (GC-MS) using selected ion monitoring (SIM). **J. Steroid Biochem.** 1987, 28: 609-618.
28. Adlercreutz, H., Fotsis, T., Höckerstedt, K., Hämäläinen, E., Bannwart, C., Bloigu, S., Valtonen, A., and Ollus, A. Diet and urinary estrogen profile in premenopausal omnivorous and vegetarian women and in premenopausal women with breast cancer. **J. Steroid Biochem.** 1989, 34: 527-530.
29. Fotsis, T., Murphy, C., and Gannon, F. Nucleotide sequence of the bovine insulin-like growth factor I (IGF-I) and its IGF-IA precursor. **Nucl. Acids Res.** 1990, 18: 676.
30. Schweigerer, L., Scheurich, P., and Fotsis, T. Enhanced MYCN oncogene expression in human neuroblastoma cells results in increased susceptibility to growth inhibition by TNF $\alpha$ . **Biochem. Biophys. Res. Commun.** 1990, 170: 1301-1307.
31. Hämäläinen, E., Fotsis, T., and Adlercreutz, H. A gas chromatographic method for the determination of neutral profiles in urine, including studies on the effect of oxytetracycline administration on these men. **Clin. Chim. Acta** 1991, 199: 205-220.
32. Adlercreutz, H., Fotsis, T., Bannwart, C., Wähälä, K., Brunow, G., and Hase, T. Isotope dilution gas chromatographic-mass spectrometric method for the determination of lignans and isoflavonoids in human urine, including identification of genistein. **Clin. Chem. Acta.** 1991, 199: 263-278.
33. Adlercreutz, H., Honjo, H., Higashi, A., Fotsis, T., Hämäläinen, E., Hasegawa, T., and Okada, H. Urinary excretion of lignans and isoflavonoid phytoestrogens in Japanese men and women consuming a traditional Japanese diet. **Am. J. Clin. Nutr.** 1991, 54: 1093-1100.
34. Schweigerer, L., and Fotsis, T. Erhöhte Expression des MYCN Ongogens in humanen Neuroblastomzellen und mögliche, neue Therapie-Ansätze. **Klin. Pädiatr.** 1991, 203: 319-322.
35. Schweigerer, L., and Fotsis, T. Angiogenesis and angiogenesis inhibitors in pediatric diseases. **Eur. J. Pediatr.** 1992, 151: 472-476.
36. Schweigerer, L., Christeleit, K., Fleischmann, G., Adlercreutz, H., Wähälä, K., Hase, T., Schwab, M., Ludwig, R., and Fotsis, T. Identification in human urine of a natural growth inhibitor for cells derived from solid pediatric tumours. **Eur. J. Clin. Invest.** 1992, 22: 260-264.
37. Fotsis, T., Pepper, M., Adlercreutz, H., Fleischmann, G., Hase, T., Montesano, R. and Schweigerer, L. Genistein, a dietary-derived inhibitor of *in vitro* angiogenesis. **Proc. Natl. Acad. Sci.** 1993, 90: 2690-2694.
38. Adlercreutz, H., Fotsis, T., Lampe, J., Wähälä, K., Mäkelä, T., Brunow, G., and Hase, T. Quantitative determination of lignans and isoflavonoids in plasma of omnivorous and vegetarian women by isotope dilution gas chromatography-mass spectrometry. **Scand. J. Clin. Lab. Invest.** 1993, 53 (Suppl 215): 5-18.
39. Johannessen, G. C, Adlercreutz, H., Fotsis, T., and Lonning, E. Plasma and urinary oestrogens in breast cancer patients on treatment with 4-hydroxyandrostenedione. **Brit. J. Cancer** 1993, 68: 393-398.
40. Fotsis, T., Zhang, Y., Pepper, M.S., Adlercreutz, H., Montesano, R., Nawroth, P.P., and Schweigerer, L. The endogenous oestrogen metabolite 2-methoxyestradiol inhibits angiogenesis and suppresses tumour growth. **Nature** 1994, 368: 237-239.
41. Adlercreutz, H., Gorbach, S.L., Goldin, B.R., Woods, M.N., Dwyer, J.T., Höckerstedt, K.A.V., Wähälä, K.T., Hase, T., Hämäläinen, E.K., and Fotsis, T. Diet and urinary profile in various populations. A preliminary report. **Polycyclic Aromatic Compounds**, 1994, 6: 261-273.
42. Adlercreutz, H., Fotsis, T., Watanabe, S., Lampe, J., Wähälä, K., Mäkelä, T., and Hase, T. Determination of lignans and isoflavonoids in plasma by isotope dilution gas chromatography-mass spectrometry. **Cancer Detection and Prevention** 1994, 18: 259-271.
43. Adlercreutz, H., van der Wildt, J., Kinzel, J., Attala, H., Wähälä, K., Mäkelä, T., Hase, T., and Fotsis, T. Lignan and isoflavonoid conjugates in human urine. **J. Steroid Biochem. Mol. Biol.** 1995, 52: 97-103.

44. Adlercreutz, H., Fotsis, T., Kurzer, M., Wähälä, K., Mäkelä, T., and Hase, T. Isotope dilution gas chromatographic-mass spectrometric method for the determination of unconjugated lignans and isoflavonoids in human feces, with preliminary results in omnivorous and vegetarian women. **Analytical Biochemistry** 1995, 225: 101-108.
45. Adlercreutz, H.T., Goldin, B.R., Gorbach, S.L., Höckerstedt, K.A.V., Watanabe, S., Hämäläinen, E.K., Markkanen, M.H., Mäkelä, T.H., Wähälä, K.T., Hase, T.A. and Fotsis, T. Soybean phytoestrogen intake and cancer risk. **J. Nutr.** 1995, 125: 757S-770S.
46. Fotsis, T., Pepper, M., Adlercreutz, H., Hase, T., Montesano, R., and Schweigerer, L. Genistein, a dietary ingested isoflavonoid, inhibits cell proliferation and *in vitro* angiogenesis. **J. Nutr.** 1995, 125: 790S-797S.
47. Lonning, P.E., Johannessen, D.C., Lien, E.A., Ekse, D., Fotsis, T., and Adlercreutz, H. Influence of tamoxifen on sex hormones, gonadotrophins and sex hormone binding globulin in postmenopausal breast cancer patients. **J. Steroid Biochem. Mol. Biol.** 1995, 52: 491-496.
48. Lonning, P.E., Helle, S-I., Johannessen, D.C., Adlercreutz, H., Lien, E.A., Tally, M., Ekse, D., Fotsis, T., Anker, G.B., and Hall, K. Relations between sex hormones, sex hormone binding globulin, insulin-like growth factor-1 and insulin-like growth factor binding protein-1 in post-menopausal breast cancer patients. **Clinical Endocrinology** 1995, 42: 23-30.
49. Musey, P.I., Adlercreutz, A., Gould, K.G., Collins, D.C., Fotsis, T., Bannwart, C., Mäkelä, T., Wähälä, K., Brunow, G., and Hase, T. Effect of diet on lignans and isoflavonoids phytoestrogens in chimpanzees. **Life Sciences** 1995, 57: 655-664.
50. Pipili-Synetos, E., Papageorgiou, A., Sakkoula, E., Sotiropoulou, G., Fotsis, T., Karakiulakis, G., and Maragoudakis, M.E. Inhibition of angiogenesis, tumour growth and metastasis by the NO-releasing vasodilators, isosorbide mononitrate and dinitrate. **Br. J. Pharmacol.** 1995, 116: 1829-1834.
51. Mazur, W., Fotsis, T., Wähälä, K., Ohjala, S., Salakka, A., and Adlercreutz, H. Isotope dilute gas chromatographic-mass spectrometric method for the determination of isoflavonoids, coumestrol, and lignans in food samples. **Analytical Biochemistry** 1996, 233: 169-180.
52. Wilm, M., Shevchenko, A., Houthaeve, T., Breit, S., Schweigerer, L., Fotsis, T., and Mann, M. Femtomole sequencing of proteins from polyacrylamide gels by nano-electrospray mass spectrometry. **Nature** 1996, 379: 466-469.
53. Fotsis, T., Pepper, M.S., Aktas, E., Breit, S., Rasku, S., Adlercreutz, H., Wähälä, K., Montesano, R., and Schweigerer, L. Flavonoids, dietary-derived inhibitors of cell proliferation and *in vitro* angiogenesis. **Cancer Research** 1997, 57: 2916-2921.
54. Kruse, F.T., Jousen, A.M., Fotsis, T., Schweigerer, L., Rohrschneider, K., Volcker, H.E. Inhibition of neovascularization of the eye by dietary factors exemplified by isoflavonoids. **Ophthalmology** 1997, 94: 152-156.
55. Adlercreutz, H., and Fotsis, T. Comment on altered hydroxylation of estrogen in patients with postmenopausal osteopenia. **J. Clin. Endocrinol. Metab.** 1998, 83: 4170-4171.
56. Pappa, A., Seferiadis, K., Fotsis, T., Shevchenko, A., Marselos, M., Tsolas, O., Messinis, I.E. Purification of a candidate gonadotrophin surge attenuating factor from human follicular fluid. **Hum. Reprod.** 1999, 14: 1449-1456.
57. Gong, H., Zolter, F., von Recklinghausen, G., Rossler, J., Breit, S., Havers, W., Fotsis, T., Schweigerer, L. Arginine deiminase inhibits cell proliferation by arresting cell cycle and inducing apoptosis. **Biochem. Biophys. Res. Commun.** 1999, 261: 10-14.
58. Fotsis, T., Breit, S., Lutz, W., Rössler, J., Hatzi, E., Schwab, M., and Schweigerer, L. Down-regulation of endothelial cell growth inhibitors by enhanced MYCN oncogene expression in human neuroblastoma cells. **Eur. J. Biochem.** 1999, 263: 757-764.
59. Breit, S., Rössler, J., Fotsis, T., and Schweigerer, L. *N-myc* down-regulates activin A. **Biochem. Biophys. Res. Commun.** 2000, 274: 405-409.
60. Breit, S., Ashman, K., Wilting, J., Rössler, J., Hatzi, E., Fotsis, T\*, and Schweigerer, L\*. The *N-myc* oncogene in human neuroblastoma cells: down-regulation of an angiogenesis inhibitor identified as activin A. **Cancer Res.** 2000, 60: 4596-4601. \*These authors contributed equally to this work
61. Xagorari, A., Papapetropoulos, A., Mavromatis, A., Economou, M., Fotsis, T., and Roussos, C. Luteolin inhibits an endotoxin-stimulated phosphorylation cascade and proinflammatory cytokine production in macrophages. **J. Pharmacol. Exp. Therap.** 2001, 296: 181-187.
62. Murphy, C., Saffrich, R., Olivo-Marin, J-C., Giner, A., Ansorge, W., Fotsis, T., and Zerial, M. Dual function of rhoD in vesicular movement and cell motility. **Eur. J. Cell Biol.** 2001, 80: 391-398.
63. Kotanidou, A., Xagorari, A., Bagli, E., Kitsanta, P., Fotsis, T., Papapetropoulos, A., and Roussos, C.. Luteolin reduces LPS-induced lethal toxicity and expression of pro-inflammatory molecules in mice. **Am. J. Resp. Crit. Care Med.** 2002, 165: 818-823.
64. Panopoulou, E., Gillooly, D.J., Jeffrey, J.L., Zerial, M., Stenmark, H., Murphy, C\*, and Fotsis, T\*. Early Endosomal Regulation of Smad-Dependent Signaling in Endothelial Cells. **J. Biol. Chem.** 2002, 277: 18046-18052. \*These authors contributed equally to this work
65. Hatzi, E., Murphy, C., Zoepfel, A., Rasmussen, H., Morbidelli, L., Ahorn, A., Kunisada, K., Tontsch, U., Klenk, M., Yamauchi-Takahara, Y., Ziche, M., Rofstad, E.K., Schweigerer, L., and Fotsis, T. *N-myc* Oncogene Overexpression

- Down-Regulates IL-6; Evidence that IL-6 Inhibits Angiogenesis and Suppresses Neuroblastoma Tumour Growth. **Oncogene** 2002, 16: 3552-3561.
66. Hatzi, E., Murphy, C., Zoepfel, A., Ahorn, A., Tontsch, U., Bamberger A-M., Yamauchi-Takahara, Y., Schweigerer, L., and Fotsis, T. N-myc Oncogene Overexpression Down-Regulates Leukemia Inhibitory Factor in Neuroblastoma. **Eur. J. Biochem.** 2002, 269: 3732-3741.
  67. Roussou I, Lambropoulos I, Pagoulatos GN, Fotsis T, Roussis IG. Decrease of heat shock protein levels and cell populations by wine phenolic extracts. **J Agric Food Chem.** 2004, 52(4): 1017-24.
  68. Bagli E, Stefaniotou M, Morbidelli L, Ziche M, Psillas K, Murphy C, Fotsis T. Luteolin inhibits vascular endothelial growth factor-induced angiogenesis; inhibition of endothelial cell survival and proliferation by targeting phosphatidylinositol 3'-kinase activity. **Cancer Res.** 2004, 64(21): 7936-46.
  69. Adlercreutz H, Kiuru P, Rasku S, Wahala K, Fotsis T. An isotope dilution gas chromatographic-mass spectrometric method for the simultaneous assay of estrogens and phytoestrogens in urine. **J Steroid Biochem Mol Biol.** 2004, 92(5): 399-411.
  70. Panopoulou E, Murphy C, Rasmussen H, Bagli E, Rofstad EK, Fotsis T. Activin A suppresses neuroblastoma xenograft tumor growth via antimetabolic and antiangiogenic mechanisms. **Cancer Res.** 2005, 65(5): 1877-86.
  71. Karavasilis V, Malamou-Mitsi V, Briasoulis E, Tsanou E, Kitsou E, Kalofonos H, Fountzilias G, Fotsis T, Pavlidis N. Angiogenesis in cancer of unknown primary: clinicopathological study of CD34, VEGF and TSP-1. **BMC Cancer** 2005, 5(1): 25.
  72. Karavasilis V, Malamou-Mitsi V, Briasoulis E, Tsanou E, Kitsou E, Kalofonos H, Fountzilias G, Fotsis T, Pavlidis N. Matrix metalloproteinases in carcinoma of unknown primary. **Cancer.** 2005, 104(10): 2282-7.
  73. Goulas V, Exarchou V, Trognanis AN, Psomiadou E, Fotsis T, Briasoulis E, Gerothanassis IP. Phytochemicals in olive-leaf extracts and their antiproliferative activity against cancer and endothelial cells. **Mol Nutr Food Res.** 2009, 53: 600-608.
  74. Kardassis D, Murphy C, Fotsis T, Moustakas A and Stournaras C. Control of TGF $\beta$  signal transduction by small GTPases. **FEBS J** 2009, 276: 22947-65.
  75. Bellou S, Mark A Hink, AM, Bagli E, Panopoulou E, Bastiaens PIH, Murphy C, Fotsis T. VEGF Auto-regulates its Proliferative and Migratory ERK1/2 and p38 MAPK Cascades by Enhancing the Expression of DUSP1 and DUSP5 Phosphatases in Endothelial Cells. **Am J Physiol Cell Physiol** 2009 297: C1477-89.
  76. Moutzi SS, Roberts LM, Joyce T, Euagelidou M, Probert L, Frilingos S, Fotsis T, and Pintzas A. Gene expression profile associated with oncogenic RAS-induced senescence, cell death and transforming properties in human cells. **Cancer Invest** 2010, 28: 563-587.
  77. G.Sflomos, E.Kostaras, E. Panopoulou, N. Pappas, A.Kyrkou, A. Politou, T Fotsis & C.Murphy. ERBIN is a novel SARA-interacting Protein: Competition between SARA and SMAD2/3 for binding to ERBIN, **J Cell Sci.** 2011, 124: 3209-22.
  78. Stoyianni A, Goussia A, Pentheroudakis G, Siozopoulou V, Ioachim E, Krikelis D, Golfinopoulos V, Cervantes A, Bobos M, Fotsis T, Bellou S, Fountzilias G, Malamou-Mitsi V, Pavlidis N. Immunohistochemical study of the epithelial-mesenchymal transition phenotype in cancer of unknown primary: incidence, correlations and prognostic utility. **Anticancer Res.** 2012, 32(4):1273-81.
  79. Bellou S, Karali E, Bagli E, Al-Maharik N, Morbidelli L, Ziche M, Adlercreutz H, Murphy C, Fotsis T. The isoflavone metabolite 6-methoxyequol inhibits angiogenesis and suppresses tumor growth. **Mol Cancer** 2012 May 14;11(1):35.
  80. Kyrkou A, Soufi M, Bahtz R, Ferguson C, Bai M, Parton RG, Hoffmann I, Zerial M, Fotsis T, Murphy C. RhoD participates in the regulation of cell-cycle progression and centrosome duplication. **Oncogene.** 2013, 32 (14): 1831-42.
  81. Kyrkou A, Soufi M, Bahtz R, Ferguson C, Bai M, Parton RG, Hoffmann I, Zerial M, Fotsis T, Murphy C. The RhoD to centrosomal duplication. **Small GTPases** 2013, 4 (2).
  82. Kostaras E., Sflomos G, Pedersen NM, Stenmark H, Fotsis T\* and Murphy C\*. SARA and RNF11 Interact with Each Other and ESCRT-0 Core Proteins and Regulate Degradative EGFR Trafficking. **Oncogene** 2013, 32 (44): 5220-32. \*These authors contributed equally to this work.
  83. Bellou S, Pentheroudakis G, Murphy C, and Fotsis T. Anti-angiogenesis in cancer therapy: Hercules and Hydra. **Cancer Letters** 2013, 338: 219-28.
  84. Kostaras E., Pedersen NM, Stenmark H, Fotsis T and Murphy C. SARA and RNF11 at the crossroads of EGFR signaling and trafficking. **Methods in Enzymology** 2014, 535:225-47.
  85. Karali E., Bellou S., Stellas D., klinakis A., Murphy C, and Fotsis T. VEGF Signals through ATF6 and PERK to Promote Endothelial Cell Survival and Angiogenesis in the Absence of ER Stress. **Molecular Cell** 2014, 54: 559-72.
  86. Karali E., Bellou S., Stellas D., klinakis A., Murphy C, and Fotsis T. VEGF signalling, mTOR complexes, and the endoplasmic reticulum: Towards a role of metabolic sensing in the regulation of angiogenesis. **Molecular & Cellular Oncology** 1:3, e964024; 2014.
  87. Sanchez-Duffhues G, Fotsis T, ten Dijke P. Signal Transduction: Gain of Activin Turns Muscle into Bone. **Curr Biol.** 2015, 25(23): R1136-8.

88. Yang J, Altahan AM, Hu D, Wang Y, Cheng PH, Morton CL, Qu C, Nathwani AC, Shohet JM, Fotsis T, Koster J, Versteeg R, Okada H, Harris AL, Davidoff AM. The role of histone demethylase KDM4B in Myc signaling in neuroblastoma. **J Natl Cancer Inst.** 2015, 107(6):djv080.
89. Tsolis K, Bagli E, Kanaki K, Zografou S, Carpentier S, Bei E, Christoforidis S, Zervakis M, Murphy C, Fotsis T, & Economou A. Proteome changes during transition from human embryonic to vascular progenitor cells. **J. Proteome Res** 2016, 15 (6): 1995-2007.
90. Mantzaris MD, Bellou S, Skiada V, Kitsati N, Fotsis T, Galaris D. Intracellular labile iron determines H<sub>2</sub>O<sub>2</sub>-induced apoptotic signaling via sustained activation of ASK1/JNK-p38 axis. **Free Radic Biol Med.** 2016, 97: 454-465.
91. Kyrkou A, Stellas D, Syrrou M, Klinakis A, Fotsis T & Murphy C. Generation of human induced pluripotent stem cells in defined, feeder-free conditions. **Stem Cell Research.** 2016, 17 (2): 458-460.
92. Kouroupis D\*, Kyrkou A\*, Triantafyllidi E, Katsimpoulas M, Chalepakis G, Goussia A, Georgoulis A, Murphy C & Fotsis T. Generation of stem cell-based bioartificial anterior cruciate ligament (ACL) grafts for effective ACL rupture repair. **Stem Cell Research.** 2016, 17 (2): 448-457. \*These authors contributed equally
93. Basagiannis D, Zografou S, Murphy C, Fotsis T, Morbidelli L, Ziche M, Bleck C, Mercer J, and Christoforidis S. VEGF induces signalling and angiogenesis by directing VEGFR2 internalisation via macropinocytosis. **J. Cell Sci.** 2016, 129 (21): 4091-4104.
94. Vlaikou AM, Kouroupis D, Sgourou A, Markopoulos GS, Bagli E, Markou M, Papadopoulou Z, Fotsis T, Nakos G, Lekka ME, Syrrou M. Mechanical stress affects methylation pattern of GNAS isoforms and osteogenic differentiation of hAT-MSCs. **Biochim Biophys Acta** 2017, 1864(8): 1371-1381.
95. Kolettis TM, Bagli E, Barka E, Kouroupis D, Kontonika M, Vilaeti, AD, Markou M, Roumpi M, Maltabe V, La Rocca V, Agathopoulos S, Fotsis T. Medium-term Electrophysiologic Effects of a Cellularized Scaffold Implanted in Rats After Myocardial Infarction. **Cureus** 2018; 10(7): e2959.
96. Markou M, Kouroupis D, Badounas F, Katsouras A, Kyrkou A, Fotsis T, Murphy C, Bagli E. Tissue Engineering Using Vascular Organoids From Human Pluripotent Stem Cell Derived Mural Cell Phenotypes. **Front Bioeng Biotechnol.** 2020;8:278. eCollection 2020.
97. Papadopoulos A\*, Chalmantzi V\*, Mikhaylichenko O, Hyvönen M, Stellas D, Kanhere A, Heath J, Cunningham DL, Fotsis T and Murphy C. Combined transcriptomic and phosphoproteomic analysis of BMP4 signaling in human embryonic stem cells. **Stem Cell Res** 2020; 50: 102133. \*These authors contributed equally
98. Xydias D, Ziakas G, Psilodimitrakopoulos S, Lemonis A, Bagli E, Fotsis T, Gravanis A, Tzeranis SD, and Stratakis E. Three-dimensional characterization of collagen remodeling in cell-seeded collagen scaffolds via polarization second harmonic generation. **Biomedical Optic Express** 2021; 12: 1136-1156. eCollection 2021.
99. Papadopoulos A, Chalmantzi V, Hyvönen M, Stellas D, Syrrou M, Heath J, Fotsis T and Murphy C. Supporting data on combined transcriptomic and phosphoproteomic analysis of BMP4 signaling in human embryonic stem cells. **Data Brief** 2021; 35: 106844. eCollection 2021.
100. Kostopoulou N\*, Bellou S\*, Bagli E, Markou M., Kostaras E, Hyvönen M, Kalaitzidis Y, Papadopoulos A, Chalmantzi V, Kyrkou A, Fotsis T and Murphy C. Embryonic Stem Cells Are Devoid of Macropinocytosis, a Trafficking Pathway for Activin A in Differentiated Cells. **J Cell Sci** 2021; 134: jcs246892.
101. Chalkiadaki K, Statoulla E, Markou M, Bellou S, Bagli E, Fotsis T, Murphy C, Ghogkas CG. Translational control in neurovascular brain development. **R Soc Open Sci** 2021; 8: 211088.
102. Chalmantzi V, Simitzi C, Papadopoulos A, Bagli E, Murphy C, Stratakis E, Fotsis T. Culturing Human Pluripotent Stem Cells on Micropatterned Silicon Surfaces. **Methods Mol Biol** 2022;2454:49-59.

#### Articles in books and congress proceedings

1. Adlercreutz, H., Fotsis, T., and Heikkinen, R. Current state of art in the analysis of estrogens. In: **Advances in Steroid Analysis**, ed. Görög, S., Akadémia Kiadó, Budapest 1982, 1: pp.3-33.
2. Adlercreutz, H., and Fotsis, T. Chemical assays of catechol estrogens and their monomethyl ethers. In: **Catechol Estrogens**, eds Merriam, G.R. and Lipsett, M.B., Raven Press, New York 1983, pp.57-74.
3. Adlercreutz, H., Fotsis, T., Heikkinen, R., Dwyer, J.T., Woods, M.N., Goldin, B.R., and Gorbach, S.L. Lignaaniin, enterolaktonin ja enterodioliin erittyminen virtsaan menopausin jälkeen kasvissyöjillä ja kaikkiruokaisilla naisilla sekä rintasyöpäpotilailla. In: **Ravitsemus (Nutrition Research)**, ed. Sahi, T., Huuna-Seppälä, A., ja Seppänen, R., Helsinki 1983, pp.140-143.
4. Bannwart, C., Fotsis, T., Heikkinen, R., and Adlercreutz, H. Gas chromatographic-mass Spectrometric (GC-MS) studies on non-steroidal estrogens and lignans, which interfere with the GC assays of urinary estrogens. In: **Advances in Steroid Analysis**, ed. Görög, S., Akadémia Kiadó, Budapest 1985, 2: pp.385-388.
5. Fotsis, T., Adlercreutz, H. and Bannwart, C. Determination of the estrogen profile in non-pregnancy urine utilizing ion-exchange chromatography and selected ion monitoring: preliminary results. In: **Advances in Steroid Analysis**, ed. Görög, S., Akadémia Kiadó, Budapest 1985, 2: pp.389-398.
6. Adlercreutz, H., Höckerstedt, K., Bannwart, C., Hämäläinen, E., Fotsis, T., and Bloigu, S. Association between dietary fiber, urinary excretion of lignans and isoflavonic phytoestrogens, and plasma non-protein bound sex hormones in

- relation to breast cancer. In: **Progress in Cancer Research and Therapy**; vol 35: Hormones and Cancer, eds. Bresciani, F., King, R.J.B., Lippman, M.E., and Raynaud, J-P., Raven Press, Ltd., New York 1988, pp.409-412.
7. Fotsis, T., Pepper, M.S., Aktas, E., Jousen, A., Kruse, F., Adlercreutz, H., Wähälä, K., Hase, T., Montesano, R., and Schweigerer, L. Inhibitors of angiogenesis in human urine. In: **Molecular, Cellular and Clinical Aspects of Angiogenesis**, ed. M. Maragoudakis, Plenum Press, New York and London 1996, pp 213-227.
  8. Fotsis, T., Pepper, M.S., Montesano, R., Aktas, E., Breit, S., Schweigerer, L., Rasku, S., Wähälä, K., Adlercreutz, H. Phytoestrogens and inhibition of angiogenesis. In: **Baillière's Clinical Endocrinology and Metabolism**, ed Adlercreutz, H., Baillière Tindal, London, Philadelphia, Sydney, Tokyo, Toronto 1998, 12 (phytoestrogens): 649-666.
  9. Hatzl, E., Breit, S., Zoephel, A., Ashman, K., Tontsch, U. Ahorn, H., Murphy, C., Schweigerer, L\*, Fotsis, T\*. MYCN oncogene and angiogenesis: Down regulation of endothelial growth inhibitors in human neuroblastoma cells. In: **Angiogenesis: From the Molecular to Integrative Pharmacology**, ed. M. Maragoudakis, Kluwer Academic/Plenum Publishers, New York 2000, pp. 239-248. (*Adv Exp Med Biol* 2000, 476: 239-48). \* These authors contributed equally to this work