

**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>EPIGBRCATEM</i>	100.000	100.000	01.03.2012	29.02.2016
<b>NSRF</b>					
InteregV-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>03EA 645</i>	198.088	199.088	01.07.2007	30.06.2009
PENED	<i>03EA 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 SYNERGY GRANT	<i>NEUROPHENE</i>	80.000	60.000	2020.	2022
ELIDEK	<i>MorphoVess</i>	400.000	220.000	1.2.2023	31.12.2025
ELIDEK PhD studentship	<i>Retinal organoids</i>	32.400		2022	2025
ELIDEK PhD studentship	<i>Vasculogenesis</i>	36.000		2024	2027
		<b>27.226.031</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 16,572 citations and the 9 articles in books 273 citations. Thus, the total research work has received **16,845** references (Google Scholar). This means that on average each original publication is cited  $16845/102 = 165$  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.
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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.
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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.
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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.
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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.

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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.
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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.
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39. Johannessen, G. C, Adlerceutz, 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.
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