

CURRICULUM VITAE

NAME: Isidoros Beis

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Human Physiology, 157 84 Panepistimioupolis, Ilisia, Athens.

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DATE AND PLACE OF BIRTH: 06-03-1946, Athens

EDUCATION

1969: BSc Natural Sciences, University Of Athens

1970: Master of Science (Molecular Enzymology), University of Warwick, U.K.

1973: Doctor of Philosophy (Dept. of Zoology, Division of Muscle Mechanisms and Insect Physiology) University of Oxford, U.K.

PROFESSIONAL EXPERIENCE

- 1973-75: Military service (Greek Navy)
- March 1975 - November 1975: Postdoctoral Researcher Fellow, University of Oxford, Depts. of Zoology and Biochemistry and University of London, King's College, Dept. of Biochemistry
- November 1975 - November 1977: Postdoctoral Researcher Fellow, University of London, King's College, Dept. of Biochemistry
- November 1977 – December 1993: Professor of Animal Physiology, School of Biology, Aristotle University of Thessaloniki.
- Summer 1978, 1979, 1982: Visitor Professor, Dept.of Zoology, University of Wales at Aberystwick.
- 1977 – 1993: Director of Animal Physiology Laboratory, A.U.Th.
- 1987 - 93: Director of Zoology Dept.
- 1991-93: Senate member (Aristotle University of Thessaloniki)
- January 1994-August 1996: Professor, Zoology Dept., School of Biology, University of Athens.
- August 1996-present: Professor, Dept. of Animal and Human Physiology, School of Biology, University of Athens.
- 1995-1996: Director of Zoology Dept., N.K.U.A
- 1996- present:Director, Dept. of Animal and Human Physiology, N.K.U.A
- 2001- 2005: Chairman of School of Biology, N.K.U.A

Others:

- Reviewer of research grants
- G.S.R.T.
- E.U.
- President of the Biomedical Sciences Research Center «Alexander Fleming» 1997-2000
- National Representative in E.C. (Programm: “Improvement of human potential and the social-economic basis of knowledge) Πρόγραμμα:

- Member of the National Rescriptive Council 1998-2001

* Reviewer:

- ◆ University of Crete
- ◆ Aegean University
- ◆ University of Thrace
- ◆ Graduate students of various Universities
- ◆ Hellenic Scholarship Foundation

AWARDS:

1964-68: Hellenic Scholarship Foundation

1970-73: Wellcome Trust

1975-77: Science Research Center (UK)

1977-2010: E.U., NATO, G.S.R.T., PENED, Empeirikeio Foundation, MINEDU

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

Hellenic Society of Biological Sciences

European Society of Comparative Physiology.

Biochemical Society

Hellenic Society of Biochemistry and Biophysics

RESEARCH INTERESTS

Regulation in metabolism. Studies on metabolism of various perfused vertebrate organs. Calcium paradox in vertebrate heart. Calpain-calpastatin system in vertebrate and invertebrate muscles. Studies on mitogen activated protein kinases (MAPKs) in vertebrate heart.

SUPERVISOR OF 10 Ph.D. STUDENTS

TEACHING

- ◆ Practicals in Comparative Physiology 1970-1973.
- ◆ Regulation in Metabolism, University of London, 2 years.
- ◆ Animal Physiology, Dept. of Biology, A.U.Th., 15 years.
- ◆ Comparative Animal Physiology, Dept. of Biology, A.U.Th., 2 years.
- ◆ Special Topics on Animal Physiology, Dept. of Biology, A.U.Th., 13 years.
- ◆ Human Physiology, Pharmaceutical Dept., A.U.Th., 3 years.
- ◆ Animal Physiology, School of Biology, University of Athens, 7 years.

PUBLICATIONS

A. THESES

1. **Beis I. (1970)** Some studies of alanine aminotransferase. Master's Thesis. University of Warwick, UK.
2. **Beis I. (1973)** Studies on the Control of Energy Metabolism in muscle. Ph. D. Thesis. Dept. of Zoology University of Oxford, UK.

B. ORIGINAL ARTICLES

1. Barrett J. and **Beis I. (1973)**. Nicotinamide and adenosine nucleotide levels in *Ascaris lumbricoides*, *Hymenolepis diminuta* and *Fasciola hepatica*. **Int. J. for Parasitol.**, **3** : 271-273. (5-year Impact Factor):4.006
2. Barrett J. and **Beis I. (1973)**. The redox state of the free nicotinamide-adenine couple in the cytoplasm and mitochondria or the muscle tissue from *Ascaris lumbricoides* (Nematoda). **Comp. Biochem. Physiol.**, **44A**: 331-340. (5-year Impact Factor):2.129
3. Barrett J. and **Beis I. (1973)**. Studies of glycolysis in the muscle tissue of *Ascaris lumbricoides*. **Comp. Biochem. Physiol.**, **44B**: 751-761. (5-year Impact Factor):1.814
4. **Beis I.** and Barrett J. (1974). Studies on adenine nucleotide exchange in mitochondria from tissue of *Ascaris lumbricoides* (Nematoda). **Int. J. for Parasitol.**, **4**: 663-187. (5-year Impact Factor):4.006
5. Barrett J. and **Beis I.(1975)**. Energy metabolism in developing *Ascaris lumbricoides* eggs. **Devel. Biol.**, **42**: 181-187. (5-year Impact Factor):4.689
6. **Beis I.** and Barrett J. (1975). Energy metabolism in developing *Ascaris lumbricoides* eggs. Steady state of intermediary metabolites. **Devel. Biol.**, **42**: 188-195. (5-year Impact Factor):4.689
7. **Beis I.** and Newsholme E.A. (1975). The contents of adenine nucleotides, phosphogens and some glycolytic intermediates in resting muscles from vertebrates and invertebrates. **Biochem. J.**, **152**: 23-32. (5-year Impact Factor):4.365
8. **Beis I. (1976)**. The content of citrate in resting muscles from vertebrates and invertebrates. **Experientia**, **32**: 191-192. (5-year Impact Factor):1.603
9. **Beis I.** and Newsholme E.A. (1976). Effects of calcium ions on adenine nucleotide translocase from cardiac muscle. **J. Mol. Cell. Cardiol.**, **8**: 803-816. (5-year Impact Factor):4.738
10. Leech A., **Beis I.** and Newsholme E.A. (1978). Radiochemical assays for creatine kinase and arginine kinase using rapid ion-exchange separations. **Analyt. Biochem.**, **90**: 561-575. (5-year Impact Factor): 4.365
11. Newsholme E.A., **Beis I.**, Leech A. and Zammit V. (1978). The role of creatine kinase and arginine kinase in muscle. **Biochem. J.**, **172**: 533-537. (5-year Impact Factor): 4.365

12. Zammit V., **Beis I.** and Newsholme E.A. (1978). Maximum activities and effects of fructose diphosphate on pyruvate kinase from muscles of vertebrates and invertebrates in relation to the control of glycolysis. **Biochem. J.**, *174*: 989-998. (5-year Impact Factor): 4.365
13. Scrutton M. and **Beis I.** (1979). Inhibitory effects of histidine and their reversal. **Biochem. J.**, *177*: 833-846. (5-year Impact Factor): 4.365
14. **Beis I.** and Barrett J. (1979). The contents of adenine nucleotides and glycolytic and tricarboxylic acid cycle intermediates in activated and non-activated plerocercoids of *Schistocephalus solidus*. **Int. J. for Parasitol.**, *9*: 465-468. (5-year Impact Factor): 4.006
15. **Beis I.** and Barrett J. (1980). Oxidative enzymes in plerocercoids of *Schistocephalus solidus*. **Int. J. for Parasitol.**, *10*: 151-153. (5-year Impact Factor): 4.006
16. Barrett J., **Beis I.** and Manousis A. (1980). Carbohydrate catabolism in the palaeonemertine *Cephalothrix bioculata*. **Comp. Biochem. Physiol.**, *66B*: 585-588. (5-year Impact Factor): 1.814
17. **Beis I.**, Manousis A. and Barrett J. (1980). Studies on the respiration of the polychaete *Ophelia bicornis*. **Comp. Biochem. Physiol.**, *67A*: 303-305. (5-year Impact Factor): 2.129
18. **Beis I.** and Theophilidis G. (1982). Phosphofructokinase in the plerocercoids of *Schistocephalus solidus*. **Int. J. for Parasitol.**, *12*: 389-493. (5-year Impact Factor): 4.006
19. Barrett J. and **Beis I.** (1982). Catalase in free-living and parasitic platyhelminths. **Experientia**, *38*: 536-537. (5-year Impact Factor): 1.603
20. Kaloyianni M. and **Beis I.** (1984). Studies on the energy metabolism of *Rana ridibunda* erythrocytes. **J. Comp. Physiol.**, *155B*: 109-115. (5-year Impact Factor): 1.924
21. Kaloyianni M. and **Beis I.** (1984). Purification, catalytic and regulatory properties of *Rana ridibunda* erythrocyte pyruvate Kinase. **Comp. Biochem. Physiol.**, *79B*: 245-250. (5-year Impact Factor): 1.814
22. Gaitanaki C., Koliais S. and **Beis I.** (1985). Monoclonal antibodies to pyruvate kinase of rabbit skeletal muscle that distinguish the type M isoenzyme from other types of isoenzymes in rabbit and other species. **Mol. Physiol.**, *7*: 210-209. (5-year Impact Factor): 1.750
23. Gaitanaki C. and **Beis I.** (1985). Enzymes of adenosine metabolism in *Hymenolepis diminuta*. **Int. J. for Parasitol.**, *15*: 651-654. (5-year Impact Factor): 4.006
24. Lazou A. and **Beis I.**(1985). Enzymes of adenosine metabolism in *Rana ridibunda* heart. Purification and some properties of adenosine kinase. **Mol. Physiol.**, *8*: 131-142. (5-year Impact Factor): 1.750
25. Michaelidis B., Lazou A. and **Beis I.** (1985). Purification, catalytic and regulatory properties of pyruvate kinase from the foot of *P. caerulea* (L.). **Comp. Biochem. Physiol.**, *82B*: 405-412. (5-year Impact Factor): 1.814

26. Lazou A. and **Beis I.**(1985). Studies on the energy metabolism in the isolated, perfused *Rana ridibunda* heart. **Can. J. of Zool.**, **64**: 485-489. (5-year Impact Factor): 1.744
27. Lazou A. and **Beis I.** (1986). The role of adenosine in the isolated *Rana ridibunda* heart. **J. Comp. Physiol.**, **156B**: 839-844. (5-year Impact Factor): 1.814
28. Lazou A. and **Beis I.** (1986). Effects of adenosine perfusion on the metabolism and the contractile activity of *Rana ridibunda* heart. **Comp. Biochem. Physiol.**, **86C**: 415-419. (5-year Impact Factor): 2.539
29. Lazou A., Gaitanaki C., Michaelidis B., Papadopoulos A. and **Beis I.** (1987). Purification, catalytic and regulatory properties of malate dehydrogenase from the foot of *P. caerulea* (L.). **Comp. Biochem. Physiol.**, **88B**: 1033-1040. (5-year Impact Factor): 1.814
30. Michaelidis B., Gaitanaki C. and **Beis I.** (1988). Modification of pyruvate kinase from the foot of *P. caerulea* (L.) during anaerobiosis. **J. Exp. Zool.**, **248**: 264-271. (5-year Impact Factor): 3.126
31. Lazou A., Michaelidis B. and **Beis I.** (1989). Evidence for glycolytic enzyme binding during anaerobiosis of the foot muscle of *P. caerulea*. **J. Comp. Physiol.**, **158B**: 771-777. (5-year Impact Factor): 1.924
32. Michaelidis B., Lazou A. and **Beis I.** (1989). Control of glycolysis in *P. caerulea* foot muscle. The possible role of enzyme binding. **Comp. Biochem. Physiol.**, **93B**: 247-250. (5-year Impact Factor): 1.814
33. Kalomenopoulou M., Kaloyianni M. and **Beis I.** (1989). Purification and regulatory properties of pigeon erythrocyte Pyruvate Kinase. **Comp. Biochem. Physiol.**, **93B**: 697-706. (5-year Impact Factor): 1.814
34. Papadopoulos A., Gaitanaki C. and **Beis I.** (1990). Pyruvate kinase isoenzymes in marine invertebrates: A comparative study by the use of Monoclonal Antibodies. **Comp. Biochem. Physiol.**, **96B**: 229-234. (5-year Impact Factor): 1.814
35. Touraki M. and **Beis I.** (1990). Characterization of the Calcium paradox in the isolated perfused frog heart: enzymatic ionic, contractile and electrophysiological studies. **J. Comp. Physiol.**, **160B**: 113-118. (5-year Impact Factor): 1.924
36. Michaelidis B. and **Beis I.** (1990). Studies on the anaerobic energy metabolism in the foot muscle of marine gastropod *P. caerulea*. **Comp. Biochem. Physiol.**, **95B**: 493-500. (5-year Impact Factor): 1.814
37. Kalomenopoulou M. and **Beis I.** (1990). Studies of the pigeon red blood cell metabolism. **Comp. Biochem. Physiol.**, **95B**: 677-684. (5-year Impact Factor): 1.814
38. Gaitanaki C., Papadopoulos A. and **Beis I.** (1990). Time course of covalent modification of pyruvate kinase during anaerobiosis in the mantle muscle and the hepatopancreas of the common limpet *Patella caerulea*(L.). **J. Comp. Physiol.**, **160B**: 529-535. (5-year Impact Factor): 1.924
39. Michaelidis B., Papadopoulos A. and **Beis I.** (1990). Effect of anoxia on the kinetic properties of pyruvate kinase and phosphofructokinase on glycogen

- phosphorylase activity in marine worms and earthworms. **J. Comp. Physiol., 160B: 201-206.** (5-year Impact Factor): 1.924
40. Papadopoulos A., Michaelidis B. and **Beis I. (1991)**. Pyruvate kinase from the earth worm *Allolobophora calliginosa*: modification of the enzyme anaerobiosis possibly by phosphorylation/dephosphorylation. **Can. J. of Zool., 69: 251-254.** (5-year Impact Factor): 1.744
 41. Touraki M. and **Beis I. (1991)**. Alterations in the energy metabolism of the isolated perfused frog heart during calcium depletion and subsequent repletion. **J. Comp. Physiol., 161B: 85-92.** (5-year Impact Factor): 1.924
 42. Touraki M. and **Beis I. (1991)**. Protective effects of manganese, cobalt, nickel and barium against a calcium paradox in the isolated frog heart. **J. Exp. Zool., 259: 287-293.** (5-year Impact Factor): 3.126
 43. Touraki M., Thomopoulos G. and **Beis I. (1991)**. Effects of calcium depletion and calcium paradox on the ultrastructure of the frog heart. **J. of Sub. Cytol. Pathol., 23: 295-303.** (5-year Impact Factor): 0.608
 44. Kaloyianni M. and **Beis I. (1993)**. Evidence for an alternative route of PEP Metabolism in mature nucleated frog erythrocytes. **J. Exp. Zool., 265: 422-426.** (5-year Impact Factor): 3.126
 45. Michaelidis B., Rofalikou E. and **Beis I. (1993)**. Effect of serotonin (5-Hydroxytryptamine) on glycolysis in the perfused ventricle of fresh water bivalve *Anodonta cygnea*: evidence for phosphorylation/dephosphorylation control of phosphofructokinase (PFK). **J. Exp. Biol., 180: 15-25.** (5-year Impact Factor): 3.274
 46. Lazou A., Polydoros I. and **Beis I. (1994)**. Glycolytic enzyme binding and metabolic control in anaerobic dormancy and enhydrobiosis in *Artemia* embryos. **J. Comp. Physiol., 164B: 306-311.** (5-year Impact Factor): 1.924
 47. Sargianos N., Gaitanaki C. and **Beis I. (1994)**. Purification and characterization of m-calpain from the skeletal muscle of the amphibian *Rana ridibunda*. **J. Exp. Zool., 269: 95-105.** (5-year Impact Factor): 3.126
 48. Sargianos N., Gaitanaki C. and **Beis I. (1995)**. Studies on the autolysis of m-calpain from the skeletal muscle of the amphibian *Rana ridibunda*. **J. Exp. Zool., 271: 82-93.** (5-year Impact Factor): 3.126
 49. Xomali R., Kaloyianni M. and **Beis I. (1995)**. Time course of tissue specific metabolism of the subtidal gastropod *Murex trunculus* under anaerobic conditions. **Nautilus, 110: 1-10.** (5-year Impact Factor): 0.208
 50. Hatzizisis D., Gaitanaki C. and **Beis I. (1996)**. Purification and properties of a calpain II-like proteinase from *Octopus vulgaris* arm muscle. **Comp. Biochem. Physiol., 113B: 295-303.** (5-year Impact Factor): 1.814
 51. Sargianos N., Gaitanaki C., Dimitriadis B. and **Beis I. (1996)**. Proteolytic degradation of isolated myofibrils and myofibrillar proteins by m-calpain from the skeletal muscle of the amphibian *Rana ridibunda*. **J. Exp. Zool., 276: 30-42.** (5-year Impact Factor): 3.126

52. Hatzizisis D., Gaitanaki C. and **Beis I. (2000)**. Degradation of myofibrillar proteins by a calpain-like proteinase in the arm muscle of *Octopus vulgaris*. **J. Comp. Physiol. (B)**, *170*: 447-456. (5-year Impact Factor): 1.924
53. Aggeli I.K., Gaitanaki C., Lazou A., and **Beis I. (2001)**. Activation of multiple MAPK pathways (ERKs, JNKs and p38-MAPK) by diverse stimuli in the amphibian heart. **Mol. Cell. Biochem.**, *221*: 63-69. (5-year Impact Factor): 2.033
54. Aggeli I.K., Gaitanaki C., Lazou A. and **Beis I. (2001)**. Mechanical stress rapidly activates multiple MAPK pathways (ERKs, JNKs and p38-MAPK) in the amphibian heart. **Am. J. Physiol.**, *281*: R1689-1698. (5-year Impact Factor): 3.363
55. Koufaki M., Calogeropoulou Th., Detsi A., Roditis A., Kourounakis A., Papazafiri P., Tsiakitzis K., Gaitanaki C., **Beis I.** and Kourounakis P. (2001). Novel inhibitors of lipid peroxidation with protective effects against reperfusion arrhythmias. **J. Med. Chem.**, *44*: 4300-4303. (5-year Impact Factor): 5.173
56. Aggeli I.K., Gaitanaki C., Lazou A. and **Beis I. (2002)**. Hyperosmotic and thermal stresses activate p38-MAPK in the isolated perfused amphibian heart. **J. Exp. Biol.**, *205*: 443-454. (5-year Impact Factor): 3.274
57. Gaitanaki C., Anezaki M., Margieti M., Papazafiri P. and **Beis I. (2002)**. Characterisation of the calcium paradox in the isolated pigeon heart: protection by hypothermia, acidosis and alkalosis. **Cell. Physiol. Biochem.**, *12*: 93-100. (5-year Impact Factor): 3.330
58. Aggeli I.K., Gaitanaki C., Lazou A. and **Beis I. (2002)**. α_1 - and β - adrenergic receptor stimulation differentially activate p38-MAPK and atrial natriuretic peptide production in the isolated perfused amphibian heart. **J. Exp. Biol.**, *205*: 2387-2397. (5-year Impact Factor): 3.274
59. Iliodromitis E.K., Gaitanaki C., Lazou A., Bofilis E., Karavolias G., **Beis I.** and Kremastinos D.Th. (2002). Dissociation of stress-activated protein kinase (p38-MAPK and JNKs) phosphorylation from the protective effect of preconditioning in vivo. **J. Mol. Cell. Cardiol.**, *34*: 1019-1028. (5-year Impact Factor): 4.738
60. Gaitanaki C., Papazafiri P., and **Beis I. (2003)**. The calpain-calpastatin system and the calcium paradox in the perfused pigeon heart. **Cell. Physiol. Biochem.**, *13*: 173-180. (5-year Impact Factor): 3.330
61. Gaitanaki C., Stathopoulou C., Stavridou C. and **Beis I. (2003)**. Oxidative stress stimulates multiple MAPK signalling pathways and the phosphorylation of the small HSP27 in the amphibian heart. **J. Exp. Biol.**, *206*: 2759-2769. (5-year Impact Factor): 3.274
62. Gaitanaki C., Kefaloyianni E., Marmari A. and **Beis I. (2004)**. Various stressors rapidly activate the p38-MAPK signaling pathway in *Mytilus galloprovincialis* (Lam.). **Mol. Cell. Biochem.** *260*: 119-126. (5-year Impact Factor): 2.033
63. Gaitanaki C., Labrakakis H., Papazafiri P. and **Beis I. (2004)**. Various divalent cations protect the isolated perfused pigeon heart against a calcium paradox. **J. Comp. Physiol. (B)** *174*: 171-182. (5-year Impact Factor): 1.924

64. Vassilopoulos A., Gaitanaki C., Papazafiri P. and **Beis I. (2005)**. Atrial natriuretic peptide mRNA regulation by p38-MAPK in the perfused amphibian heart. **Cell. Physiol. Biochem.** **16: 183-192.** (5-year Impact Factor): 3.330
65. Kefaloyianni E., Gourgou E., Ferle V., Kotsakis E., Gaitanaki C., and **Beis I. (2005)**. Acute thermal stress and heavy metals induce either pro- or anti-apoptotic events via p38-MAPK signal transduction pathway in *Mytilus galloprovincialis* (Lam.). **J. Exp. Biol.** **208: 4427-4436.** (5-year Impact Factor): 3.274
66. Aggeli I.K.-S, Gaitanaki C. and **Beis I. (2006)**. Oxidative stress induces the HOX-1 mRNA via p38-MAPK and ERKs 1/2 signalling pathways in rat cardiac myocytes. **Cell. Signal.** **18: 1801-1812.** (5-year Impact Factor): 4.102
67. Stathopoulou K., Gaitanaki C. and **Beis I. (2006)**. Extracellular pH changes activate the p38-MAPK signalling pathway in the perfused amphibian heart. **J Exp Biol**, **209: 1344-1354.** (5-year Impact Factor): 3.274
68. Iliodromitis E.K, Gaitanaki C., Lazou A., Bofilis E., Zoga A., **Beis I.** and Kremastinos D.T. (2006). Differential activation of mitogen activated protein kinases to ischemic and nitroglycerin-induced preconditioning. **Bas. Res. Cardiol.**, **101:327-335.** (5-year Impact Factor): 4.667
69. Gaitanaki C., Papatriantafyllou M., Stathopoulou K. and **Beis I. (2006)**. Effects of various oxidants and antioxidants on the p38-MAPK signalling pathway in the perfused amphibian heart. **Mol. Cell. Biochem.**, **291:107-117.** (5-year Impact Factor): 2.033
70. Kefaloyianni E., Gaitanaki C. and **Beis I. (2006)**. ERK1/2 and p38-MAPK/MSK1 are involved in NFkB transactivation during oxidative stress in skeletal myoblasts. **Cell. Signal.** **18: 2238-2251.** (5-year Impact Factor): 4.102
71. Andreadou I., Iliodromitis E.K., Tsovolas K., Aggeli I.K., Zoga A., Gaitanaki C., Paraskevaidis I.A, Markantonis S.L., **Beis I.** and Kremastinos D.Th (2006). Acute administration of Vitamin E triggers preconditioning via KATP channels and cyclic GMP without inhibiting lipid peroxidation. **Free Rad. Biol. Med.** **41: 1092-1099.** (5-year Impact Factor): 5.791
72. Gaitanaki C., Pliatska M., Stathopoulou K. and **Beis I. (2007)**. Cu²⁺ and acute thermal stress induce anti-apoptotic events via p38-MAPK signalling pathway in the perfused *Rana ridibunda* heart. **J. Exp. Biol.**, **210: 438-446.** (5-year Impact Factor): 3.274
73. Gaitanaki C., Kalpachidou T., Aggeli I.K.-S, Papazafiri P. and **Beis I. (2007)**. CoCl₂ induces protective events via the p38-MAPK signalling pathway and ANP in the perfused amphibian heart. **J. Exp. Biol.**, **210: 2267-2277.** (5-year Impact Factor): 3.274
74. Iliodromitis E.K., Aggeli I.K.-S., Gaitanaki C., Tsiafoutis I., Zoga A., **Beis I.** and Kremastinos D.Th. (2008). p38-MAPK is involved in restoration of the lost protection of preconditioning by nicorandil in vivo. **Eur. J. Pharmacol.**, **579: 289-297.** (5-year Impact Factor): 2.576
75. Pechtelidou A., **Beis I.** and Gaitanaki C. (2008). Transient and sustained oxidative stress differentially activate the JNK1/2 signalling pathway and apoptotic phenotype in H9c2 cells. **Mol. Cell. Biochem.**, **309: 177-189.** (5-year Impact Factor): 2.033

76. Aggeli I.K. S, **Beis I.** and Gaitanaki C. (2008). Oxidative stress and calpain inhibition induce alpha B crystallin phosphorylation via p38-MAPK and calcium-dependent signalling pathways in H9c2 cells. **Cell. Signal.**, **20**: 1292-1302. (5-year Impact Factor): 4.102
77. Gaitanaki C., Mastri M., Aggeli I.-K. S. and **Beis I.** (2008). Prolonged thermal stress induces apoptosis via the JNK1/2 signalling pathway in the perfused amphibian heart. **J. Exp. Biol.**, **211**: 2524-2532. (5-year Impact Factor): 3.274
78. Stathopoulou K., **Beis I.** and Gaitanaki C. (2008). MAPK signaling pathways are needed for survival of H9c2 cardiac myoblasts under extracellular alkalosis. **Am. J. Physiol.-Heart and Circulatory Physiology**, **295**: H1319-H1329. (5-year Impact Factor): 3.747
79. Aggeli I.-K. S., **Beis I.** and Gaitanaki C. (2010). ERKs and JNKs mediate hydrogen peroxide-induced Egr-1 expression and nuclear accumulation in H9c2 cells. **Physiol. Res.**, **59**: 443-454. (5-year Impact Factor): 1.690
80. Aggeli I.K., Kefaloyianni E., **Beis I.** and Gaitanaki C. (2010). HOX-1 and COX-2: two key regulatory mediators of skeletal myoblast tolerance under oxidative stress. **Free Radic. Res.** **44**: 679-693. (5-year Impact Factor): 2.833
81. Gourgou E., Aggeli I.K., **Beis I.** and Gaitanaki C. (2010). Hyperthermia-induced Hsp70 and MT20 transcriptional upregulation are mediated by p38-MAPK and JNKs in *Mytilus galloprovincialis* (Lamarck): a pro-survival response. **J. Exp. Biol.** **213**: 347-357. (5-year Impact Factor): 3.274
82. Aggeli I.K., Theofilatos D., **Beis I.** and Gaitanaki C. (2010). Insulin-induced oxidative stress upregulates heme oxygenase-1 via diverse signaling cascades in C2 skeletal myoblasts. **Endocrinology**, UNDER REVISION. (5-year Impact Factor): 5.103

C. ABSTRACTS IN NATIONAL AND INTERNATIONAL CONFERENCES

1. Barrett J. and **Beis I.** (1973). Energy metabolism in developing *Ascaris lumbricoides* eggs. **Abstracts Parasitology**, **67 XXII**.
2. Barrett J. and **Beis I.** (1974). Adenine nucleotide exchange in *Ascaris lumbricoides*. **Proc.Third Inter. Cong. of Parasitol.**, **3**: 1493-1494.
3. **Beis I.** and Newsholme E.A. (1975). Development of a technique for the determination of the ADP in the mitochondrial and cytoplasmic compartments of the cell. **H.B.B.S. Newsletter**, **6**: 7.
4. **Beis I.** (1975). Regulation of metabolism in the muscle. **Minerva Medica Greca**, **4**: 747-760.
5. **Beis I.** (1976). Metabolic compartmentation and energy metabolism in the muscle. **Materia Medica Greca**, **4**: 473-481.
6. Kaloyianni M. and **Beis I.** (1980). Energy metabolism in the amphibian erythrocytes. Proceedings of the 2nd Panhellenic Conference of H.S.B.S., Patra, pp. 93-95.

7. Michaelidis B. and Beis I. (1982). Study of the energy metabolism in the foot muscle of *P. caerulea*. Proceedings of the 4th Panhellenic Conference of H.S.B.S., Thessaloniki, *pp. 68-71*.
8. Lazou A and Beis I. (1982). Study of the energy metabolism in the perfused amphibian heart. Proceedings of the 4th Panhellenic Conference of H.S.B.S., Thessaloniki, *pp. 111-113*.
9. Gaitanaki C. and Beis I. (1982). Adenosine metabolism in *Hymenolepis diminuta*. Proceedings of the 4th Panhellenic Conference of H.S.B.S., Thessaloniki, *pp. 114-116*.
10. Gaitanaki C., Koliais S., Beis I. and Stavrou D. (1982). Applications of ELISA for the detection of monoclonal antibodies. Proceedings of the 4th Panhellenic Conference of H.S.B.S., Thessaloniki, *pp. 117-119*.
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