CURRICULUM VITAE

Michael Karpusas, Ph.D
Associate Professor & Laboratory Director

Address: Physics Laboratory,
Department of Biotechnology
Agricultural University of Athens
Iera Odos 75, Athens
GREECE
Tel: 210-5294221
E-mail: mkarp@aua.gr
Web: https://w1.aua.gr/gbt/en/faculty/karpusas-michael/

EDUCATION:

- **B.Sc.,** Physics (with distinction), 1985, University of Thessaloniki
- **M.Sc.,** Physics, 1989, University of Oregon
- **Ph.D**, Physics, 1990, University of Oregon

PROFESSIONAL EXPERIENCE:

2012 - today: Associate Professor and Laboratory Director, Physics Laboratory, Department of Biotechnology, **Agricultural University of Athens**

2009 - 2011: Assistant Professor PD/407, Department of Science, **Agricultural University of Athens**

2006-2009: *Researcher*, **University Research Institute for the Study and Treatment of Childhood Genetic and Malignant Diseases**, Unit of Hematology & Oncology, A' Pediatric Clinic, Medical School, U. of Athens, Children's Hospital 'Aghia Sofia', Goudi, Athens

2002-2006: *Senior Scientist*, **Locus Pharmaceuticals, Inc.,** Blue Bell, PA

2002: Assistant Professor, Medical school, **University of Crete**

2000 – 2002: *Senior Scientist*, **Biogen, Inc**., Cambridge, MA

1993 – 2000: *Research Scientist,* **Biogen, Inc.**, Cambridge, MA

1990 – 1993*: *Post-doctoral Fellow,* Wiley lab, Dept. of Biochemistry and Molecular Biology **Harvard University,** Cambridge, MA

(* interrupted from January 1992 to April 1993 due to mandatory military service)

1987-1990: *Research assistant*, Inst. of Molecular Biology, **University of Oregon,** Eugene, OR

1986-1987 *Teaching assistant*, **University of Oregon,** Eugene, OR

RESEARCH AND PROFESSIONAL INTERESTS

- Protein crystallography / structural biology
- Structure-based drug design
- Protein engineering.
- Computational Biophysics
- Structure-function studies / mutagenesis
- Protein expression and purification
- Areas of interest: structural biochemistry of kinases, integrins, interferons, TNF family, enzymes and antibodies, molecular immunology, drug discovery

REVIEWER IN FOLLOWING JOURNALS

Protein Science
Journal of Molecular Biology
Biorganic & Medicinal Chemistry Letters
Oncogene
Proteins
Journal of Molecular Modeling
Acta Crystallographica D
Molecular Pharmacology

PUBLICATION STATISTICS:

Total number of scientific citations: 2391
h-index: 30

PUBLICATIONS:

1) **Karpusas, M**., Baase,W., Matsamura, M. and Matthews, B.W.," Hydrophobic packing in T4 lysozyme probed by cavity-filling mutants." (1989) Pro.Nat.Acad.Sci.(USA) 86, 8237-8241

2) **Karpusas, M**.,Branchaud, B. and Remington S.J. : " Proposed Mechanism for the condensation reaction of citrate synthase: 1.9 Å structure of the ternary complex with oxaloacetate and carboxymethyl Coenzyme A" (1990) Biochemistry 29, 2213-2219

3) **Karpusas, M**., Holland, D. and Remington, S.J.: " 1.9 Å structures of ternary complexes of citrate syntase with D- and L-malate: Mechanistic implications"(1991) Biochemistry 30, 6024-6031

4) Liao, D-I, **Karpusas, M**. and Remington, S.J.: " Crystal structure of an open conformation of citrate synthase from chicken heart at 2.8 Å resolution." (1991) Biochemistry 30, 6031-6036

5) Wang, J., Pepinski, B., **Karpusas, M**, Liu, J. and Osborn, L.: "Crystallization and preliminary crystallographic analysis of the N-terminal two domain fragment of Vascular Cell Adhesion Molecule-1 (VCAM-1)" (1994) PROTEINS 20, 287-290

6) Osborn, L., Day, E.S, Miller, G.T., **Karpusas, M**., Tizard, R., Meuer, S.C. and Hochman. P.S. "Amino acid residues required for binding of LFA-3 (CD58) to its counter-receptor CD2."(1995) J.Exp.Med.181, 429-434

7) Collins, E.J.,Garboczi, D., **Karpusas, M.** and Wiley, D.C. "The three-dimensional structure of a Class I MHC molecule missing the a3 domain of the heavy chain" (1995) Pro.Nat.Acad.Sci.(USA) 92,1218-1221.

8) Wang, J., Pepinsky, R.B, Stehle, T., Liu, J.,**Karpusas, M**., Browning, B. and Osborn, L. "The crystal structure of an N-terminal two-domain fragment of vascular cell adhesion molecule 1 (VCAM-1): A cyclic peptide based on the domain 1 C-D loop can inhibit VCAM-1-α4 integrin interaction." (1995) Pro.Nat.Acad.Sci.(USA) 92, 5714-5718.

9) **Karpusas, M**., Hsu, Y-M., Wang, J.,Thompson, J., Lederman, S., Chess, L. and Thomas, D. "The crystal structure of an extracellular fragment of human CD40 Ligand at 2 Å resolution" (1995) Structure 3, 1031-1039.

10) Lederman, S., Cleary, A. M., Yellin, M.J., Frank, D.M., **Karpusas, M**., Thomas, D.W. & Chess, L."The central role of the CD40 ligand and CD40 pathway in T lymphocyte-mediated differentiation of B lymphocytes" (1996) Curr. Opin. in Hematology 3, 77-86

11) Wang, J., Stehle, T.,Pepinsky, R.B, Liu, J., **Karpusas, M**.,and Osborn, L. "The crystal structure of a functional fragment of VCAM-1 at 1.9 Å resolution: Implications for integrin and virus binding" (1996) Acta Cryst.D52, 369-379.

12) **Karpusas, M**., Nolte,M., Benton,C., Meier,W., Lipscomb,W.and Goelz,S. "The crystal structure of human interferon-β at 2.2 Å resolution" (1997) Pro.Nat.Acad.Sci.(USA) 94, 11813-11818.

13) Runkel L., Meier, W., Pepinski, B., **Karpusas, M**., Kimball, K., Brickelmaier, M., Jones, W. & Goelz,S. "Structural and functional differences between glycosylated and non-glycosylated forms of human interferon-β (IFN-β)" (1998) Pharm Res. 15(4): 641-649.

14) Singh, J., Garber, E., van Vlijmen, H., **Karpusas, M**., Hsu, Y-M, Zheng, Z., Naismith,J. & Thomas, D. " The role of polar interactions in the molecular recognition of CD40L with its receptor CD40" (1998) Protein Science 7: 1124 -1135.

15) **Karpusas, M**. , Whitty, A., Runkel, L. & Hochmann, P."The structure of human interferon-β: implications for activity" (1998) Cellular & Mol. Life Sci. 54:1203-1216

16) Taylor, F., Bixler, S., Budman, J., **Karpusas, M**., Ryan, S., Jaworski, G., Wen, D., Safari-Fard, A., Pollard, S. & Whitty, A." Induced fit activation mechanism of the exceptionally specific serine protease, complement factor D" (1999) Biochemistry 38: 2849-2859

17) Webster, E., Khakoo, A., Yellin, M., **Karpusas, M**., Thomas, D., Davidson, A., Christian, C. & Lederman, S. "An agressive form of polyarticular arthritis in a man with CD154 mutation (X-linked Hyper-IgM syndrome)" (1999) Arthritis Reum.42(6):1291-6

18) Nolte, M., Pepinski, R.B., Venyaminov, S.Y., Kotelianski, V., Gotwals, P.J. & **Karpusas, M.**" Crystal structure of the α1β1 integrin I-domain: insights into integrin I-domain function" (1999) FEBS Letters 452, 379-385.

19) Garber, E., Su, L., Ehrenfels, B., **Karpusas, M**. & Hsu, Y-M. "CD154 variants associated with Hyper-IgM syndrome can form oligomers and trigger CD40-mediated signals" (1999) J.Biol.Chem. 274, 33545-33550

20) Runkel, L., deBios, C., **Karpusas, M.,** Betzenhauser, M., Muldowney, C., Zafari, M., Benjamin, C., Miller, S., Hochman, P. & Whitty, A. "Structure/activity studies of HuIFNβ–1a using alanine scanning mutations: analysis of receptor binding sites and functional domains" (2000) Biochemistry 39, 2538-2551

21) **Karpusas, M**., Lucci, J., Ferrant,J., Benjamin, C., Taylor, F., Strauch, K., Garber, E., Hsu, Y-M. "Structure of CD40 Ligand in complex with the Fab fragment of a neutralizing humanized antibody" (2001) Structure 9, 321-329

22) Runkel, L., deDios, C., **Karpusas, M,** Baker, D., Li, Z., Zafari, M., Betzenhauser, M., Muldowney, C, Miller, S., Redlich, P.N., Grossberg, SE., Whitty, A., and Hochman, P. **"**Mapping of Interferon-β Epitopes Important for Receptor Binding and Activation: Comparison of Results Achieved using Antibody-based Methods and Alanine Substitution Mutagenesis" (2001) J. Interferon Cyt. Res . 21, 931-941

23**) Karpusas, M**., Cachero, TG, Qian, F., Boriack-Sjodin, A., Mullen, C., Strauch, K., Kalled, S.L "Crystal structure of human BAFF, a TNF family member that stimulates B lymphocytes" (2002) J.Mol.Biol. 315, 1145-1154

24) Taylor, F.R., Roux, K.H., Ferrant, J.L., Wilson, C., Lucci, J., Hsu, Y-M, Strauch, K., **Karpusas, M.,** Benjamin, C. " Homotrimeric CD154 forms ordered complexes with monoclonal antibodies in solution and on the cell surface" (2002) Mol.Immunol. 1118, 1-8

25) Singh. J., van Vlijmen, H., Lee, W-C., Liao, Y., Lin,K-C., Ateeq, H., Cuervo, J., Zimmerman, C., Hammond, C., **Karpusas, M**., Palmer, R., Chattopadhyay, T., Adams,S.P. "3D QSAR (COMFA) of a series of potent and highly selective VLA-4 antagonists" (2002) J. Comp.Aid.Mol.Design 16(3): 201-11

26) Zaganas I., Spanaki C., **Karpusas M.,** Plaitakis A." Substitution of Ser for Arg-443 in the Regulatory Domain of Human Housekeeping (GLUD1) Glutamate Dehydrogenase Virtually Abolishes Basal Activity and Markedly Alters the Activation of the Enzyme by ADP and L-Leucine." (2002) J.Biol.Chem. 277(48):46552-46558

27) **Karpusas, M.,** Ferrant,J., Weinreb, P., Taylor,F., Garber, E. "Crystal structure of the α1β1 integrin I domain in complex with the Fab fragment of a neutralizing antibody" (2003) J.Mol.Biol. 327, 1031-1041

28) Bukhtiyarova, M., Northrop, K., Chai, X., **Karpusas, M**., Casper, D. and Springman, E. "Improved expression, purification and crystallization of p38α MAP kinase" (2004) Prot.Exp.Purif. 37(1):154-61

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30) Bukhtiyarova, M.; **Karpusas, M**., Northrop, K., Namboodiri, H., Springman, E. "Mutagenesis of p38α MAP kinase establishes key roles of Phe169 in function and structural dynamics and reveals a novel DFG-out state" (2007) Biochemistry 46(19):5687-96.

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32) Papakyriakou, A., Vourloumis, D., Tzortzatou- Stathopoulou, F. and **Karpusas. M**. "Conformational dynamics of the EGFR kinase domain reveals structural features involved in activation" (2009) Proteins 76(2):375-86

33) Lamprou, G., Vlahopoulos, S., Papathanassiou, C., Papanikolaou, M., **Karpusas, M.**, Zoumakis, E. and Tzortzatou- Stathopoulou, F. "Prednisolone exerts late mitogenic and biphasic effects on resistant acute lymphoblastic leukemia cells" (2009) Leuk. Res. 33(12): 1684-95

34) Papakyriakou A, Katsarou ME, Belimezi M, **Karpusas, M**, Vourloumis D. "Discovery of potent vascular endothelial growth factor receptor-2 inhibitors" (2010) ChemMedChem. 5(1):118-29

35) Namboodiri HV, Bukhtiyarova M, Ramcharan J, **Karpusas, M**, Lee Y, Springman EB. "Analysis of Imatinib and Sorafenib binding to p38a compared with c-Abl and b-Raf provides structural insights for understanding the selectivity of inhibitors targeting the DFG-Out Form of protein kinases" (2010) Biochemistry. May 4;49(17):3611-8

36) Kokkinou A, Tsorteki F, **Karpusas M**, Papakyriakou A, Bethanis K, Mentzafos D. Study of

the inclusion of the (R)- and (S)-camphor enantiomers in alpha-cyclodextrin by X-ray crystallography and molecular dynamics. (2010) Carbohydr Res. May 27;345(8):1034-40

37) Hatziagapiou K., Braoudaki M., **Karpusas M**., Tzortzatou- Stathopoulou, F. "Evaluation of antitumor activity of gefitinib in pediatric glioblastoma and neuroblastoma cells" (2011) Clinic. Lab. 57(9-10):781-4

38) Moffett K, Konteatis Z, Nguyen D, Shetty R, Ludington J, Fujimoto T, Lee KJ, Chai X, Namboodiri H, **Karpusas M**, Dorsey B, Guarnieri F, Bukhtiyarova M, Springman E, Michelotti E. "Discovery of a novel class of non-ATP site DFG-out state p38 inhibitors utilizing computationally assisted virtual fragment-based drug design (vFBDD)" (2011) Bioorg Med Chem Lett. 21(23):7155-65.

39) Christoforides, E., Dimou, M. , Katinakis, P., Bethanis, K. and **Karpusas, M.**"Crystal Structure of a Bacterial Cytoplasmic Cyclophilin A in Complex with a Tetrapeptide"(2012) Acta Cryst F68, 259-264

40) **Karpusas, M.**, Axarli, I., Chiniadis, L., Papakyriakou, T., Bethanis K., Scopelitou, K.,. Clonis , YD. and Labrou, NE."The interaction of the chemotherapeutic drug chlorambucil with human glutathione transferase A1-1: kinetic and structural analysis" (2013) Plos One B 8(2):e56337

41) Katsimpouras, C., Bénarouche, A., Navarro, D., **Karpusas, M.**, Dimarogona, M., Berrin, J.-G., Christakopoulos, P., Topakas, E. "Enzymatic synthesis of model substrates recognized by glucuronoyl esterases from Podospora anserina and Myceliophthora thermophila" (2014) Appl. Microbiol. Biotechnol., 98 (12), pp. 5507-5516.

42) Nikolaivits, E., Kokkinou, A., **Karpusas, M**., Topakas, E. "Microbial host selection and periplasmic folding in Escherichia coli affect the biochemical characteristics of a cutinase from Fusarium oxysporum" (2016) Protein Expr Purif., 127, pp. 1-7.

43) Skagia, A., Vezyri, E., Sigala, M., Kokkinou, A., **Karpusas, M**., Venieraki, A., Katinakis, P., Dimou, M. "Structural and functional analysis of cyclophilin PpiB mutants supports an in vivo function not limited to prolyl isomerization activity" (2017) Genes Cells, 22 (1), pp. 32-44.

44) Hatziagapiou, K., Bethanis, K., Lambrou, G.I., Yannakopoulou, K., **Karpusas, M**., Braoudaki, M., Christoforides, E., Tsorteki, F., Milionis, V., Kavantzas, N., Tzortzatou-Stathopoulou, F., Gemou-Engesaeth, V. "Enhanced gefitinib cytotoxicity in the presence of cyclodextrins: In-vitro and biophysical studies towards potential therapeutic interventions for cancer" (2017) J. Biomed. Nanotechnol., 13 (5), pp. 522-533.

45) Skagia, A., Vezyri, E., Grados, K., Venieraki, A., **Karpusas, M**., Katinakis, P., Dimou, M. "Structure-Function Analysis of the Periplasmic Escherichia coli Cyclophilin PpiA in Relation to Biofilm Formation" (2017) J. Mol. Microbiol. Biotechnol, 27 (4), pp. 228-236.

46) Chiniadis, L., Bratsos, I, Bethanis, K., **Karpusas, M.,** Giastas, P. and Papakyriakou, A. High resolution crystal structures of a half sandwich Ru(II) coordination compound bound to hen egg-white lysozyme and proteinase K (2020) J.Biol. Inorg. Chem., Jun 25(4), 635-645.

47) Comuzzo, P., Sabrina, V, Fabris, J., Cavallaro, A., Zanella, G., **Karpusas, M**. and Kallithraka, S. "Effect of the combined application of heat treatment and proteases on protein stability and volatile composition of Greek white wines" (2020) Oeno-One, 54(1), 175-188.

BOOK CHAPTERS

1) Wozniac, J., Zhang, X-J., Wilson, K., Weaver, L.H., Tronrud, D.E., Pjura, P.E, Nicholson, H., Matsamura, M., **Karpusas, M**., Jacobson, R., Faber, R., Dao-pin, S., Bell, J.A, Alber, T. and Matthews, B.W, "Crystallographic and Genetic Aproaches toward the design of proteins of enhanced thermostability" in Crystallographic and Modelling Methods in Molecular Design. C.Bugg &S.E.Ealick, eds. Springer-Verlag,New York.

2) Bell, J.A, Daopin, S., Faber, R., Jacobson, R., **Karpusas, M**., Matsamura, M., Nicholson, H., Pjura, P.E, Tronrud, D.E, Weaver, L.H, Wilson, K.P, Wozniac, J.A, Zhang, X-J, Alber,T. and Matthews,B.W. : " Approaches toward the design of proteins of enhanced thermostability" in The use of X-ray crystallography in the design of antiviral agents. Copyright 1990 by Acad. Press.

3) Bell, J.A, Brennan, R.G., Daopin, S., Faber, R., Jacobson, R., **Karpusas, M**., Matsamura, M., Nicholson, H., Pjura, P.E, Roderick, S.L., Tronrud, D.E, Weaver, L.H, Wilson, K.P, Wozniac, J.A, Zhang, X-J and Matthews,B.W.: " Structural and genetic analysis of protein-protein and protein-DNA interactions" in Frontiers in drug research. Alfred Benzon Symposium 28, 281-284

4) Whitty, A & **Karpusas, M.** "Structure and activity of human Interferon-β–1a (AVONEX®): A case study of the use of structural data in the arena of protein pharmaceuticals" (2003) Protein Structure Copyright Dekker book publishers

ABSTRACTS

1) **Karpusas, M**., Hsu, Y-M., Wang, J.,Garber, E., Strauch, K., Thompson, J., Mullen, C., Lederman, S., Chess, L. and Thomas, D. "Crystallographic studies structure of human CD40 Ligand at 2 Å " European Cytokine Network 7, 170 (International TNF Congress, 1996)

2) **Karpusas, M**., Nolte,M., Benton,C., Meier,W., Lipscomb,W.and Goelz, S."The crystal structure of human interferon-β reveals a zinc-mediated dimer different from that of human interferon-α.(1997) J. Interferon & Cytokine Res.17, suppl.2, S60 (Annual meeting of the International Society for Interferon and Cytokine research, San Diego, California, 1997)

3) Runkel, L., **Karpusas, M.,** deBios, C., Betzenhauser, M., Muldowney, C., Zafari, M., Benjamin, C., Miller, S., Hochman, P. & Whitty, A. "Structure/activity studies of HuIFNβ–1a using alanine scanning mutations: analysis of receptor binding sites and functional domains"

European Cytokine Network 9, 346 (1998) (Annual meeting of the International Society for Interferon and Cytokine research, Jerusalem, Israel,1998)

4) Goelz, S.E., Runkel, L., Meier, W., Whitty, A., **Karpusas, M**., Kimball, K., Brickelmaier, M. Muldowney, C., Jones, W., Pepinsky, B. "Human IFN-β: The biochemical basis for the difference in biological activity and immunogenicity" Le Journal des Sciences Neurologiques Suppl 1-S31

5) Benjamin, Christopher D.; Hess, Donna; Sizing, Irene; Zafari, Mohammad; Garber, Ellen; Ehrenfels, Barbara; Madigan, E.; Hsu, Yen-Ming; Lucci, Jodi; **Karpusas**, Michael; Thomas, David. "Epitope mapping and affinity analysis of monoclonal antibodies specific for human CD40L". Tissue Antigens 1996, 48(4-2), 1996, p.477.

6) **Karpusas, M**., Nolte,M., Pepinsky, R.B. Venyaminov, S.Y., Koteliansky, V. Gotwals, P.J. "Crystal structure of the α1β1 integrin I-domain: insights into the mechanisms of collagen binding" (2000) XVIIth FECTS meeting abstracts.
7) **Karpusas, M.,** Chai, X., Northrop, K., Bukhtiyarova, M., Moffett, K., Nguyen, D., Shetty, R., Michelotti, E., Fujimoto, T., Ghose, A., Clark, M., Hollinger, F., Guarnieri, F. & Springman, E "Crystallographic Analysis of Inhibitor Binding to p38 MAP Kinase: Validation of Locus Pharmaceuticals' computational fragment-based approach" (2004) Keystone Structural Genomics conference proceedings.

8) Shetty R, Moffett KK, Nguyen D, **Karpusas, M.** *et al*. Novel inhibitors of p38 MAP kinase. Abstracts of papers of the American Chemical Society 228: U947-U947 219-MEDI Part 1 Aug 22, 2004

9) Hollinger FP, Konteatis Z, Michelotti EL, **Karpusas, M.** *et. al* "Are fragment-protein binding energies sufficient to predict compound affinity? – P38 as a case study in structure based design using fragments" Abstracts of papers of the American Chemical Society 229: U761-U761 040-COMP Part 1 MAR 13 2005

10) Braoudaki M., **Karpusas, M**, Katsibardi K, Papathanassiou Ch, Karamolegou K, Tzortzatou-Stathopoulou F. "Frequency of FLT3 mutations in childhood acute lymphoblastic leukemia" (2007) 18th Congress of the Hellenic Society of Hematology Abtsracts.

11) Namboodiri, H., Ramcharan, J. **Karpusas, M.,** Bukhtiyarova, M., Springman, E "Conformational Plasticity of p38 MAP Kinase DFG motif mutants in response to inhibitor binding (2008) Keystone Structural Genomics conference proceedings

12) Papakyriakou, A. and **Karpusas. M**. "Conformational dynamics of the EGFR kinase domain reveals structural features involved in activation" (2008) 4th Conference of the Hellenic Crystallographic Association Abstracts.

13) L. Chiniadis, K. Bethanis, N. Labrou, I. Axarli, K. Skopelitou and **M. Karpusas**, "Structural characterization of human glutathione transferase A1-1 in complex with the anti-cancer drug

chlorambucil." 25th European Crystallographic Meeting, ECM 25, Istanbul, Acta Cryst. A65, s 151, (2009)

14) E. Christoforides, M. Dimou , P. Katinakis , K. Bethanis and **M. Karpusas**, "Crystal Structure of the Cyclophilin-A enzyme from azotobacter ***vinelandii" (2010)*** 5th Conference of the Hellenic Crystallographic Association

15) E. Christoforides, M. Dimou, P. Katinakis, K. Bethanis, and **M. Karpusas** "Crystal structure of cyclophilin-a enzyme from Azotobacter vinelandii" (2011) XXII Congress and General Assembly of International Union of Crystallography (IUCr), Madrid, Spain Acta Cryst. A67, C790,

16) L. Chiniadis, P. Giastas, I. Bratsos, **M. Karpusas**, K. Bethanis, "Crystal structures of Ruthenium anti-cancer compounds bound to hen egg white lysozyme" (2012) 6th International Conference of the Hellenic Crystallographic Association

17) Kokkinou, A, Skagia, A., Vezyri, E., Sigala, M., Venieraki, A., Katinakis, P., Dimou, M. **Karpusas, M**., "Structure- function studies of cyclophilin mutants" (2016) HeCra-HSCBB-16 International Conference

18) Bethanis, K., Christoforides E., Yannakopoulou, K E, Hatziagapiou, K., Braoudaki, M., Tsorteki, F, Lambrou, G.I., Tzortzatou-Stathopoulou, F., Gemou-Engesaeth, V.& **Karpusas, M**. "Structure and anti-proliferative activity of gefitinib-cyclodextrin complexes": (2016) HeCra-HSCBB-16 International Conference

19) Bethanis, K., Christoforides E., Yannakopoulou, K E, Hatziagapiou, K., Braoudaki, M., Tsorteki, F, Lambrou, G.I., Tzortzatou-Stathopoulou, F., Gemou-Engesaeth, V.& **Karpusas, M**. "Structure and anti-proliferative activity of gefitinib-cyclodextrin complexes": (2016) HeCra-HSCBB-16 International Conference

20) Κ. Χατζηαγαπίου, Μ. Μπραουδάκη, Γ. Λάμπρου, Κ. Μπεθάνης, Κ. Γιαννακοπούλου , Μ. **Καρπούζας** , Φ. Τσορτέκη , Η. Χριστοφορίδη, Καβαντζάς, Ν. Μηλιώνης, Β. Τζωρτζάτου-Σταθοπούλου, Φ. Γέμου-Engesaeth, Β. ΜΙΑ ΚΑΙΝΟΤΟΜΟΣ ΚΑΙ ΣΤΟΧΕΥΜΕΝΗ ΘΕΡΑΠΕΥΤΙΚΗ ΠΡΟΣΕΓΓΙΣΗ ΣΤΟ ΝΕΥΡΟΒΛΑΣΤΩΜΑ: ΣΥΜΠΛΟΚΑ ΜΙΚΡΟΕΓΚΛΕΙΣΜΟΥ ΓΕΦΙΤΙΝΙΜΠΗΣ-ΚΥΚΛΟΔΕΞΤΡΙΝΩΝ, 16ο Ετήσιο Παιδονευρολογικό Συνέδριο, Ελληνική Παιδονευρολογική Εταιρεία, 9-10 Δεκεμβρίου 2016, Ζάππειο, Αθήνα, ανακοίνωση ΑΑ13.

21) Christoforidis, E., Balaouras, A. & **Karpusas, M**. "Analysis of the effect of mutations on the structural dynamics and catalysis of the cyclophilin enzyme" (2021) 10th HECRA Int. Conference.

22) Rokomos, K., Koskosii, F., **Karpusas, M.**, Dimou, M. "Studies on the role of *Bacillus subtilis* cyclophilin in bacterial growth and development" (2023) Mikrobiokosmos 10th Int. conference, Larisa.

PATENTS:

1) Yellin, M., Lederman, S., Chess, L., **Karpusas, M.**, Thomas, D. "Use of T-BAM (CD40L) technology to treat inflammatory kidney diseases", MX9805724/1998-10-31

2) Yellin, M., Lederman, S., **Karpusas, M**., Thomas, D. "Therapeutic applications of T-BAM (CD40-L) technology to treat diseases involving smooth muscle cells" US2008050369/2008-02-28, US2003219437/ 2003-11-27

3) Yellin, M., Lederman, S., Chess, L., **Karpusas, M.**, Thomas, D. "Therapeutic application of anti-T-BAM monoclonal antibody 5c8", JP2007238630/2007-09-20, EP1666062/ 2006-06-07

4) **Karpusas, M.,** Hsu, Y-M., Taylor, F., Zhongli, Z. "Co-crystal structure of monoclonal antibody 5c8 and CD154, and use thereof in drug design", AU2001288675B/2007-08-30, US2004006208/ 2004-01-08

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