

List of Publications

(Articles, Chapters and Reviews, Books and Abstracts)

Articles

1. **Lazarovici, P.** and Pener, M.P. Juvenile hormones (JHs) and completion of oocyte development in the african migratory locust: a comparative and quantitative study. **Gen Comp Endocrinol 33**: 434-452, 1977.
2. **Lazarovici, P.** and Pener, M.P. The relations of the pars intercerebralis, corpora allata, and juvenile hormone to oocyte development and oviposition in the african migratory locust. **Gen Comp Endocrinol 35**: 375-386, 1978.
3. Pener, M.P. and **Lazarovici, P.** The effect of exogenous juvenile hormones on mating behaviour and yellow colour in allatectomized adult males of the desert locust. **Physiol Entomol 4**: 251-261, 1979.
4. Teitelbaum, Z., **Lazarovici, P.** and Zlotkin, E. Selective binding of the scorpion venom, insect toxin, to insect nervous tissues. **Insect Biochem 9**: 343-346, 1979.
5. Primor, N. and **Lazarovici, P.** *Pardachirus marmoratus* (Red Sea flatfish) secretion and its isolated toxic fraction pardaxin: the relationship between hemolysis and ATPase inhibition. **Toxicon 19**: 573-578, 1981.
6. Breuer, E., Deutsch, J. and **Lazarovici, P.** A practical synthesis of the aggregation pheromone of *Tribolium*. **Chem Indus** 907-908, 1982.
7. **Lazarovici, P.**, Menashe, M., Primor, N., Hochman, J. and Zlotkin, E. The cytotoxicity of a cobra snake phospholipase to S-49 mouse lymphoma cells. **Arch Toxicol 51**: 161-173, 1982.
8. **Lazarovici, P.** and Zlotkin, E. A mammal toxin derived from the venom of a chactoid scorpion. **Comp Biochem Physiol C 71**: 177-181, 1982.
9. **Lazarovici, P.**, Yanai, P., Pelhate, M. and Zlotkin, E. Insect toxic component from the venom of a chactoid scorpion, *Scorpio maurus palmatus* (Scorpionidae). **J Biol Chem 257**: 8397-8404, 1982.
10. Lester, D., **Lazarovici, P.**, Pelhate, M. and Zlotkin, E.: Purification, characterization and action of two insect toxins from the venom of the scorpion *Buthotus judaicus*. **Biochem Biophys Acta 701**: 370-381, 1982.
11. **Lazarovici, P.**, Shapira, D. and Shaaya, E. Determination of ecdysone titers by double-antibody precipitation in the tropical warehouse moth *Ephestia cautella* (Lepidoptera, Phycitidae). **Comp Biochem Physiol 74**: 525-529, 1983.
12. **Lazarovici, P.**, Tayot, J.L. and Yavin, E. Affinity chromatographic purification and characterization of two iodinated tetanus toxin fractions exhibiting different binding properties. **Toxicon 22**: 401-413, 1984.
13. **Lazarovici, P.**, Menashe, M. and Zlotkin, E. Toxicity to crustacea due to polypeptide-phospholipase interaction in the venom of a chactoid scorpion. **Arch Biochem Biophys 229**: 270-286, 1984.
14. **Lazarovici, P.**, Shapira, D., Pisarev, V. and Shaaya, E. Ecdysteroid level and the change in sensitivity to a juvenile hormone analogue in *Ephestia cautella* larvae. **Arch. Insect Biochem. Physiol. 1**: 409-415, 1984.
15. **Lazarovici, P.** and Yavin, E. Tetanus toxin interaction with human erythrocytes. I. Properties of polysialoganglioside association with the cell surface. **Biochim Biophys Acta 812**: 523-531, 1985.

16. **Lazarovici, P.** and Yavin, E. Tetanus toxin interaction with human erythrocytes. II. Kinetic properties of toxin association and evidence for a ganglioside-toxin macromolecular complex formation. **Biochim Biophys Acta 812**: 532-542, 1985.
17. Loew, L.M., Benson, L., **Lazarovici, P.** and Rosenberg, I. Fluorometric analysis of transferable membrane pores. **Biochemistry 24**: 2101-2104, 1985.
18. **Lazarovici, P.** and Yavin, E. Affinity-purified tetanus neurotoxin interaction with synaptic membranes: properties of a protease-sensitive receptor component. **Biochemistry 25**: 7047-7054, 1986.
19. **Lazarovici, P.**, Primor, N. and Loew, L.M. Purification and pore-forming activity of two hydrophobic polypeptides from the secretion of the Red Sea Moses sole (*Pardachirus marmoratus*). **J Biol Chem 261**: 16704-16713, 1986.
20. Pener, M.P., Dessberg, D., **Lazarovici, P.**, Reuter, C., Tsai, L.W. and Baker, F.C. The effect of a synthetic precocene on juvenile hormone titer in late *Locusta* eggs. **J Insect Physiol 32**: 853-857, 1986.
21. Chan, K.F. and **Lazarovici, P.** *Staphylococcus aureus* alpha-toxin. 1. Effect on protein phosphorylation in myelin. **Toxicon 25**: 631-636, 1987.
22. **Lazarovici, P.** and Chan, K.F. *Staphylococcus aureus* alpha-toxin. 2. Reduction of epidermal growth factor receptor affinity in PC12 cells. **Toxicon 25**: 637-647, 1987.
23. **Lazarovici, P.**, Yanai, P. and Yavin, E. Molecular interactions between micellar polysialogangliosides and affinity-purified tetanotoxins in aqueous solution. **J Biol Chem 262**: 2645-2651, 1987.
24. **Lazarovici, P.**, Dickens, G., Kuzuya, H. and Guroff, G. Long-term, heterologous down-regulation of the epidermal growth factor receptor in PC12 cells by nerve growth factor. **J Cell Biol 104**: 1611-1621, 1987.
25. Renner, P., Caratsch, C.G., Waser, P.G., **Lazarovici, P.** and Primor, N. Presynaptic effects of the pardaxins, polypeptides isolated from the gland secretion of the flatfish *Pardachirus marmoratus*. **Neuroscience 23**: 319-325, 1987.
26. Wan, Y.J., Orrison, B.M., Lieberman, R., **Lazarovici, P.** and Ozato, K. Induction of major histocompatibility class I antigens by interferons in undifferentiated F9 cells. **J Cell Physiol 130**: 276-283, 1987.
27. Koizumi, S., Contreras, M.L., Matsuda, Y., Hama, T., **Lazarovici, P.** and Guroff, G. K-252a: a specific inhibitor of the action of nerve growth factor on PC 12 cells. **J Neurosci 8**: 715-721, 1988.
28. Lelkes, P.I. and **Lazarovici, P.** Pardaxin induces aggregation but not fusion of phosphatidylserine vesicles. **FEBS Lett 230**: 131-136, 1988.
29. Shai, Y., Fox, J., Caratsch, C., Shih, Y.L., Edwards, C. and **Lazarovici, P.** Sequencing and synthesis of pardaxin, a polypeptide from the Red Sea Moses sole with ionophore activity. **FEBS Lett 242**: 161-166, 1988.
30. Fink, D., Contreras, M.L., Lelkes, P.I. and **Lazarovici, P.** *Staphylococcus aureus* alpha-toxin activates phospholipases and induces a Ca²⁺ influx in PC12 cells. **Cell Signal 1**: 387-393, 1989.
31. **Lazarovici, P.**, Levi, B.Z., Lelkes, P.I., Koizumi, S., Fujita, K., Matsuda, Y., Ozato, K. and Guroff, G. K-252a inhibits the increase in c-fos transcription and the increase in intracellular calcium produced by nerve growth factor in PC12 cells. **J Neurosci Res 23**: 1-8, 1989.
32. **Lazarovici, P.**, Fujita, K., Contreras, M.L., DiOrio, J.P. and Lelkes, P.I. Affinity purified tetanus toxin binds to isolated chromaffin granules and

- inhibits catecholamine release in digitonin-permeabilized chromaffin cells. **FEBS Lett 253**: 121-128, 1989.
33. Rudkin, B.B., **Lazarovici, P.**, Levi, B.Z., Abe, Y., Fujita, K. and Guroff, G. Cell cycle-specific action of nerve growth factor in PC12 cells: differentiation without proliferation. **EMBO J 8**: 3319-3325, 1989.
 34. Fujita, K., Guroff, G., Yavin, E., Goping, G., Orenberg, R. and **Lazarovici, P.** Preparation of affinity-purified, biotinylated tetanus toxin, and characterization and localization of cell surface binding sites on nerve growth factor-treated PC12 cells. **Neurochem Res 15**: 373-383, 1990.
 35. Hochman, J., Park, S.S., **Lazarovici, P.**, Bergel, M. and Gottesman, M.M. Monoclonal antibodies to immunogenic lymphoma cell variants displaying impaired neoplastic properties: characterization and applications. **J Natl Cancer Inst 82**: 1821-1826, 1990.
 36. **Lazarovici, P.** Characterization and visualization of tetanus toxin acceptors on adrenal chromaffin granules. **J Physiol (Paris) 84**: 197-205, 1990.
 37. **Lazarovici, P.**, Bergel, M., Hasson, T., Rahamim, E. and Hochman, J. Immunomagnetic separation and analysis of non-malignant variants and parental malignant mouse lymphoma cells. **J Mol Recognition 4**: 143-149, 1991.
 38. **Lazarovici, P.**, Edwards, C., Raghunathan, G. and Guy, H.R. Secondary structure, permeability and molecular modeling of pardaxin pores. **J Natural Toxins 1**: 1-15, 1992.
 39. **Lazarovici, P.** and Lelkes, P.I. Pardaxin induces exocytosis in bovine adrenal medullary chromaffin cells independent of calcium. **J Pharmacol Exp Ther 263**: 1317-1326, 1992.
 40. Nikodijevic, B., Nikodijevic, D. and **Lazarovici, P.** Pardaxin-stimulated calcium uptake in PC12 cells is blocked by cadmium and is not mediated by L-type calcium channels. **J Basic Clin Physiol Pharmacol 3**: 359-370, 1992.
 41. Rasouly, D., Rahamim, E., Lester, D., Matsuda, Y. and **Lazarovici, P.** Staurosporine-induced neurite outgrowth in PC12 cells is independent of protein kinase C inhibition. **Mol Pharmacol 42**: 35-43, 1992.
 42. Abu Raya, S., Trembovler, V., Shohami, E. and **Lazarovici, P.** A tissue culture ischemic device to study eicosanoid release by pheochromocytoma PC12 cultures. **J Neurosci Methods 50**: 197-203, 1993.
 43. Arribas, M., Blasi, J., **Lazarovici, P.** and Marsal, J. Calcium-dependent and -independent acetylcholine release from electric organ synaptosomes by pardaxin: evidence of a biphasic action of an excitatory neurotoxin. **J Neurochem 60**: 552-558, 1993.
 44. Abu-Raya, S., Trembovler, V., Shohami, E. and **Lazarovici, P.** Cytolysins increase intracellular calcium and induce eicosanoids release by pheochromocytoma PC12 cell cultures. **Nat Toxins 1**: 263-270, 1993.
 45. Rasouly, D., Rahamim, E., Ringel, I., Ginzburg, I., Muarakata, C., Matsuda, Y. and **Lazarovici, P.** Neurites induced by staurosporine in PC12 cells are resistant to colchicine and express high levels of tau proteins. **Mol Pharmacol 45**: 29-35, 1994.
 46. Rasouly, D. and **Lazarovici, P.** Staurosporine induces tyrosine phosphorylation of a 145 kDa protein but does not activate gp140trk in PC12 cells. **Eur J Pharmacol 269**: 255-264, 1994.
 47. Galski, H., **Lazarovici, P.**, Gottesman, M.M., Muarakata, C., Matsuda, Y. and Hochman, J. KT-5720 reverses multidrug resistance in variant S49 mouse

- lymphoma cells transduced with the human MDR1 cDNA and in human multidrug-resistant carcinoma cells. **Eur J Cancer 31A**: 380-388, 1995.
48. Sadot, E., Barg, J., Rasouly, D., **Lazarovici, P.** and Ginzburg, I. Short- and long-term mechanisms of tau regulation in PC12 cells. **J Cell Sci 108**: 2857-2864, 1995.
 49. Shi, Y.L., Edwards, C. and **Lazarovici, P.** Ion selectivity of the channels formed by pardaxin, an ionophore, in bilayer membranes. **Nat Toxins 3**: 151-155, 1995.
 50. Rasouly, D., Shavit, D., Zuniga, R., Elejalde, R.B., Unsworth, B.R., Yayon, A., **Lazarovici, P.** and Lelkes, P.I. Staurosporine induces neurite outgrowth in neuronal hybrids (PC12EN) lacking NGF receptors. **J Cell Biochem 62**: 356-371, 1996.
 51. Sadot, E., Heicklen-Klein, A., Barg, J., **Lazarovici, P.** and Ginzburg, I. Identification of a tau promoter region mediating tissue-specific-regulated expression in PC12 cells. **J Mol Biol 256**: 805-812, 1996.
 52. Shibutani, M., Kim, E., **Lazarovici, P.**, Oshima, M. and Guroff, G. Preparation of a cell-free translation system from PC12 cell. **Neurochem Res 21**: 801-807, 1996.
 53. Ellran-Kashi, O., Trembovler, V., Abu-Raya, S., **Lazarovici, P.**, and Shohami, E. Neuroprotective effects of gangliosides on pardaxin-induced toxicity in PC12 cells. **J Natural Toxins 6**: 285-292, 1997.
 54. Friedman, L.M., Matsuda, Y. and **Lazarovici, P.** The microbial alkaloid toxin staurosporine blocks the phorbol ester-induced increase in beta-amyloid precursor protein in PC12 cells. **Nat Toxins 5**: 173-179, 1997.
 55. Jiang, H., Ulme, D.S., Dickens, G., Chabuk, A., Lavarreda, M., **Lazarovici, P.** and Guroff, G. Both p140(trk) and p75(NGFR) nerve growth factor receptors mediate nerve growth factor-stimulated calcium uptake. **J Biol Chem 272**: 6835-6837, 1997.
 56. Jiang, H., Movsesyan, V., Fink, D.W., Jr., Fasler, M., Whalin, M., Katagiri, Y., Monshipouri, M., Dickens, G., Lelkes, P.I., Guroff, G. and **Lazarovici, P.** Expression of human p140trk receptors in p140trk-deficient, PC12/endothelial cells results in nerve growth factor-induced signal transduction and DNA synthesis. **J Cell Biochem 66**: 229-244, 1997.
 57. **Lazarovici, P.**, Galski, H., Matsuda, Y. and Hochman, J. KT-5720, a new bacterial alkaloid antibiotic reverses multidrug resistance (MDR) in lymphoma and carcinoma cells overexpressing MDR1 gene. **J Natural Toxins 6**: 19-33, 1997.
 58. **Lazarovici, P.**, Oshima, M., Shavit, D., Shibutani, M., Jiang, H., Monshipouri, M., Fink, D., Movsesyan, V. and Guroff, G. Down-regulation of epidermal growth factor receptors by nerve growth factor in PC12 cells is p140(trk)-, Ras-, and Src-dependent. **J Biol Chem 272**: 11026-11034, 1997.
 59. Abu-Raya, S., Bloch-Shilderman, E., Shohami, E., Trembovler, V., Shai, Y., Weidenfeld, J., Yedgar, S., Gutman, Y. and **Lazarovici, P.** Pardaxin, a new pharmacological tool to stimulate the arachidonic acid cascade in PC12 cells. **J Pharmacol Exp Ther 287**: 889-896, 1998.
 60. Adermann, K., Raida, M., Paul, Y., Abu-Raya, S., Bloch-Shilderman, E., **Lazarovici, P.**, Hochman, J. and Wellhoner, H. Isolation, characterization and synthesis of a novel pardaxin isoform. **FEBS Lett 435**: 173-177, 1998.

61. Beit-Yannai, E., Trembovler, V., Horowitz, M., **Lazarovici, P.**, Kohen, R. and Shohami, E. Neuroprotection against oxidative stress by serum from heat acclimated rats. **Neurosci Lett 254**: 89-92, 1998.
62. Fisher, A., Haring, R., Pittel, Z., Brandeis, R., Eshhar, N., Karton Y., Meshulam H., **Lazarovici P.**, Kushnir, M., and Heldman, E. Novel therapeutic avenues in Alzheimer's disease based on M1 muscarinic agonist – an unifying concept. **Int J Ger Psychopharmacol 1**: 150-157, 1998.
63. **Lazarovici, P.**, Jiang, H. and Fink, D., Jr. The 38-amino-acid form of pituitary adenylate cyclase-activating polypeptide induces neurite outgrowth in PC12 cells that is dependent on protein kinase C and extracellular signal-regulated kinase but not on protein kinase A, nerve growth factor receptor tyrosine kinase, p21(ras) G protein, and pp60(c-src) cytoplasmic tyrosine kinase. **Mol Pharmacol 54**: 547-558, 1998.
64. Paul, Y., Weiss, A., Adermann, K., Erdmann, G., Kassebaum, C., **Lazarovici, P.**, Hochman, J. and Wellhoner, H. Translocation of acylated pardaxin into cells. **FEBS Lett 440**: 131-134, 1998.
65. Shibutani, M., **Lazarovici, P.**, Johnson, A.C., Katagiri, Y. and Guroff, G. Transcriptional down-regulation of epidermal growth factor receptors by nerve growth factor treatment of PC12 cells. **J Biol Chem 273**: 6878-6884, 1998.
66. Tabakman, R., **Lazarovici, P.**, Matsuda, Y., Brodie, C. and Ovadia, H. Protein kinase C-independent selective induction of nitric oxide synthase activity in rat alveolar macrophages by staurosporine. **Nitric Oxide 2**: 250-258, 1998.
67. Abu-Raya, S., Bloch-Shilderman, E., Lelkes, P.I., Trembovler, V., Shohami, E., Gutman, Y. and **Lazarovici, P.** Characterization of pardaxin-induced dopamine release from pheochromocytoma cells: role of calcium and eicosanoids. **J Pharmacol Exp Ther 288**: 399-406, 1999.
68. Abu-Raya, S., Blaugrund, E., Trembovler, V., Shilderman-Bloch, E., Shohami, E. and **Lazarovici, P.** Rasagiline, a monoamine oxidase-B inhibitor, protects NGF-differentiated PC12 cells against oxygen-glucose deprivation. **J Neurosci Res 58**: 456-463, 1999.
69. Brodie, C., Bogi, K., Acs, P., **Lazarovici, P.**, Petrovics, G., Anderson, W.B. and Blumberg, P.M. Protein kinase C-epsilon plays a role in neurite outgrowth in response to epidermal growth factor and nerve growth factor in PC12 cells. **Cell Growth Differ 10**: 183-191, 1999.
70. Jiang, H., Takeda, K., **Lazarovici, P.**, Katagiri, Y., Yu, Z.X., Dickens, G., Chabuk, A., Liu, X.W., Ferrans, V. and Guroff, G. Nerve growth factor (NGF)-induced calcium influx and intracellular calcium mobilization in 3T3 cells expressing NGF receptors. **J Biol Chem 274**: 26209-26216, 1999.
71. **Lazarovici, P.** and Fink, D., Jr. Heterologous upregulation of nerve growth factor-TrkA receptors in PC12 cells by pituitary adenylate cyclase-activating polypeptide (PACAP). **Mol Cell Biol Res Commun 2**: 97-102, 1999.
72. Stein, S., Weiss, A., Adermann, K., **Lazarovici, P.**, Hochman, J. and Wellhoner, H. A disulfide conjugate between anti-tetanus antibodies and HIV (37-72)Tat neutralizes tetanus toxin inside chromaffin cells. **FEBS Lett 458**: 383-386, 1999.
73. Abu-Raya, S., Blaugrund, E., Trembovler, V. and **Lazarovici, P.** Rasagiline, a novel monoamine oxidase-B inhibitor, with neuroprotective effects under ischemic conditions in PC12 cells. **Drug Develop Res 50**: 285-290, 2000.

74. Desai, R., Peretz, A., Idelson, H., **Lazarovici, P.** and Attali, B. Ca^{2+} -activated K^+ channels in human leukemic Jurkat T cells. Molecular cloning, biochemical and functional characterization. **J Biol Chem 275**: 39954-39963, 2000.
75. Moalem, G., Gdalyahu, A., Shani, Y., Otten, U., **Lazarovici, P.**, Cohen, I.R. and Schwartz, M. Production of neurotrophins by activated T cells: implications for neuroprotective autoimmunity. **J Autoimmun 15**: 331-345, 2000.
76. Monshipouri, M., Jiang, H. and **Lazarovici, P.** NGF stimulation of erk phosphorylation is impaired by a point mutation in the transmembrane domain of trkA receptor. **J Mol Neurosci 14**: 69-76, 2000.
77. Bloch-Shilderman, E., Jiang, H., Abu-Raya, S., Linial, M. and **Lazarovici, P.** Involvement of extracellular signal-regulated kinase (ERK) in pardaxin-induced dopamine release from PC12 cells. **J Pharmacol Exp Ther 296**: 704-711, 001.
78. Chiarenza, A., **Lazarovici, P.**, Lempereur, L., Cantarella, G., Bianchi, A.^S and Bernardini, R. Tamoxifen inhibits nerve growth factor-induced proliferation of the human breast cancerous cell line MCF-7. **Cancer Res 61**: 3002-3008, 2001.
79. Davidson, B., **Lazarovici, P.**, Ezersky, A., Nesland, J.M., Berner, A., Risberg, B., Trope, C.G., Kristensen, G.B., Goscinski, M., van de Putte, G. and Reich, R. Expression levels of the nerve growth factor receptors TrkA and p75 in effusions and solid tumors of serous ovarian carcinoma patients. **Clin Cancer Res 7**: 3457-3464, 2001.
80. Jiang, H., Movsesyan, V., Liu, X.W., Katagiri, Y., Monshipoyri, M. and **Lazarovici, P.** A double cysteine trkA mutant exhibiting reduced NGF binding and delayed Erk signaling. **J Mol Neurosci 17**: 293-302, 2001.
81. Abu-Raya, S., Tabakman, R., Blaugrund, E., Trembovler, V. and **Lazarovici, P.** Neuroprotective and neurotoxic effects of monoamine oxidase-B inhibitors and derived metabolites under ischemia in PC12 cells. **Eur J Pharmacol 434**: 109-116, 2002.
82. Bloch-Shilderman, E., Jiang, H. and **Lazarovici, P.** Pardaxin, an ionophore neurotoxin, induces PC12 cell death: activation of stress kinases and production of reactive oxygen species. **J Nat Toxins 11**: 71-85, 2002.
83. Bloch-Shilderman, E., Abu-Raya, S., Trembovler, V., Boschwitz, H., Gruzman, A., Linial, M. and **Lazarovici, P.** Pardaxin stimulation of phospholipases A2 and their involvement in exocytosis in PC-12 cells. **J Pharmacol Exp Ther 301**: 953-962, 2002.
84. Cantarella, G., Lempereur, L., Presta, M., Ribatti, D., Lombardo, G., **Lazarovici, P.**, Zappala, G., Pafumi, C. and Bernardini, R. Nerve growth factor-endothelial cell interaction leads to angiogenesis in vitro and in vivo. **FASEB J 16**: 1307-1309, 2002.
- Cantarella, G., Lempereur, L., Presta, M., Ribatti, D., Zappala, G., Lombardo, G., **Lazarovici, P.**, Pafumi C. and Bernardini, R. Nerve growth factor - endothelial cell interaction leads to angiogenesis in vitro and in vivo. **FASEB J.** 2002. (online) <http://www.fasebj.org/cgi/doi/10.1096/fj02-1000fje>
85. Katzir, I., Shani, J., Regev, K., Shabashov, D. and **Lazarovici, P.** A quantitative bioassay for nerve growth factor, using PC12 clones expressing different levels of trkA receptors. **J Mol Neurosci 18**: 251-264, 2002.

86. Tabakman, R., **Lazarovici, P.** and Kohen, R. Neuroprotective effects of carnosine and homocarnosine on pheochromocytoma PC12 cells exposed to ischemia. **J Neurosci Res 68**: 463-469, 2002.
87. Vaudry, D., Stork, P.J., **Lazarovici, P.** and Eiden, L.E. Signaling pathways for PC12 cell differentiation: making the right connections. **Science 296**: 1648-1649, 2002.
- Vaudry, D., Stork, P.J.S., **Lazarovici, P.** and Eiden, L.E. Differentiation pathway in PC12 cells. **Science STKE**, 2002. (online) <http://stke.sciencemag.org/cgi/cm/CMP8038>
88. Davidson, B., Reich, R., **Lazarovici, P.**, Nesland, J.M., Skrede, M., Risberg, B., Trope, C.G. and Florenes, V.A. Expression and activation of the nerve growth factor receptor TrkA in serous ovarian carcinoma. **Clin Cancer Res 9**: 2248-2259, 2003.
89. Davidson, B., Givant-Horwitz, V., **Lazarovici, P.**, Risberg, B., Nesland, J.M., Trope, C.G., Schaefer, E. and Reich, R. Matrix metalloproteinases (MMP), EMMPRIN (extracellular matrix metalloproteinase inducer) and mitogen-activated protein kinases (MAPK): co-expression in metastatic serous ovarian carcinoma. **Clin Exp Metastasis 20**: 621-631, 2003.
90. Givant-Horwitz, V., Davidson, B., **Lazarovici, P.**, Schaefer, E., Nesland, J.M., Trope, C.G. and Reich, R. Mitogen-activated protein kinases (MAPK) as predictors of clinical outcome in serous ovarian carcinoma in effusions. **Gynecol Oncol 91**: 160-172, 2003.
91. Katzir, I., Shani, J., Goshen, G., Sela, J., Ninary, E., Dogonovski, A.M., Shabashov, D., Inoue, S., Ikeda, K., Hayashi, K., Gorinstein, S., Deutsch, J. and **Lazarovici, P.** Characterization of nerve growth factors (NGFs) from snake venoms by use of a novel, quantitative bioassay utilizing pheochromocytoma (PC12) cells overexpressing human trkA receptors. **Toxicon 42**: 481-490, 2003.
92. Katzir, I., Shani, J., Shabashov, D., Dagan, J. and **Lazarovici, P.** Establishment and characterization of pheochromocytoma tumor models expressing different levels of trkA receptors. **Cancer Lett 200**: 177-185, 2003.
93. Davidson, B., Reich, R., **Lazarovici, P.**, Ann Florenes, V., Nielsen, S. and Nesland, J.M. Altered expression and activation of the nerve growth factor receptors TrkA and p75 provide the first evidence of tumor progression to effusion in breast carcinoma. **Breast Cancer Res Treat 83**: 119-128, 2004.
94. Davidson, B., Reich, R., **Lazarovici, P.**, Florenes, V.A., Risberg, B., Nielsen, S., Sert, B. and Bedrossian, C. Expression of the nerve growth factor receptors TrkA and p75 in malignant mesothelioma. **Lung Cancer 44**: 159-165, 2004.
95. Florenes, V.A., Maelandsmo, G.M., Holm, R., Reich, R., **Lazarovici, P.** and Davidson, B. Expression of activated TrkA protein in melanocytic tumors: relationship to cell proliferation and clinical outcome. **Am J Clin Pathol 122**: 412-420, 2004.
96. Kisiel, D.G., Calvete, J.J., Katzhendler, J., Fertala, A., **Lazarovici, P.** and Marcinkiewicz, C. Structural determinants of the selectivity of KTS-disintegrins for the alpha1beta1 integrin. **FEBS Lett 577**: 478-482, 2004.
97. Tabakman, R., Jiang, H., Levine, R.A., Kohen, R. and **Lazarovici, P.** Apoptotic characteristics of cell death and the neuroprotective effect of homocarnosine on pheochromocytoma PC12 cells exposed to ischemia. **J Neurosci Res 75**: 499-507, 2004.

98. Tabakman, R., Jiang, H., Schaefer, E., Levine, R.A. and **Lazarovici, P.** Nerve growth factor pretreatment attenuates oxygen and glucose deprivation-induced c-Jun amino-terminal kinase 1 and stress-activated kinases p38alpha and p38beta activation and confers neuroprotection in the pheochromocytoma PC12 Model. **J Mol Neurosci** 22: 237-250, 2004.
99. Jiang, H., Zhang, L., Koubi, D., Kuo., J., Groc, L., Rodriguez, A.I., Jackson Hunter, T., Tang, S. **Lazarovici, P.**, Gautam, S.C. and Levine, R. Roles of Ras-Erk in apoptosis of PC12 cells induced by trophic factor withdrawal or oxidative stress. **J Mol Neurosci** 25: 133-140, 2005.
100. Dolle, J.P., Rezvan, A., Allen, F.D., **Lazarovici, P.** and Lelkes P.I. Nerve growth factor-induced migration of endothelial cells. **J Pharmacol Exp Ther** 315,1220-7, 2005.
101. Galski, H., Sivan, H., **Lazarovici, P.** and Nagler, A. In vitro and in vivo reversal of MDR1-mediated multidrug resistance by KT-5720: Implications on hematological malignancies. **Leuk Res** 30:1151-1158, 2006.
102. Rocha, A.S., Risberg, B., Magalhaes, J., Trovisco V., de Castro I.V., **Lazarovici P.**, Soares P., Davidson B. and Sobrinho-Simoes M. The p75 neurotrophin receptor is widely expressed in conventional papillary thyroid carcinoma. **Hum Pathol** 37:562-568, 2006.
103. **Lazarovici, P.**, Gazit, A., Staniszewska, I., Marcinkiewicz, C. and Lelkes, P.I. Nerve growth factor promotes angiogenesis in the quail chorioallantoic membrane. **Endothelium** 13:51-59, 2006.
104. Lipman, T., Tabakman, R., **Lazarovici, P.** Neuroprotective effects of the stable nitroxide compound Tempol on 1-methyl-4-phenylpyridinium ion-induced neurotoxicity in the Nerve Growth Factor-differentiated model of pheochromocytoma PC12 cells. **Eur J Pharmacol** 549:50-57, 2006.
105. Odegaard, E., Staff, A.C., Abeler, V.M., Kopolovic, J., Onsrud, M., **Lazarovici P.**, and Davidson B. The activated nerve growth factor receptor p-TrkA is selectively expressed in advanced-stage ovarian carcinoma. **Hum Pathol** 38:140-146, 2007.
106. Arien-Zakay H, Nagler A, Galski H **Lazarovici P** Neuronal conditioning medium and nerve growth factor induce neuronal differentiation of collagen-adherent progenitors derived from human umbilical cord blood. **J Mol Neurosci** 32:179-191, 2007.
107. Lecht, S., Arien-Zakay, H., Tabakman, R., Jiang, H., Fink, D.W., and **Lazarovici, P.** Dexamethasone-induced down-regulation of nerve growth factor receptor p75^{NTR} is mediated by glucocorticoid type II receptor in PC12 cell model. **Open Pharmacol J** 1:19-26, 2007.
108. Brown, M.C. Calvete, J.J. Staniszewska, I. Walsh, E.M. Perez-Liz, G. Del Valle, L. **Lazarovici, P.** and Marcinkiewicz, C VEGF-related protein isolated from Vipera palestinae venom, promotes angiogenesis. **Growth Factors** 25:108-117, 2007.)
109. Staniszewska, I., **Lazarovici, P.**, Oliva, I., Sheppard, D., Tuszynski, G.P., and Marcinkiewicz, C. The integrin alpha9beta1 is a receptor for nerve growth factor and other neurotrophins. **J Cell Sci** 121:504-513, 2007
110. Kolusheva S, Lecht S, Derazon Y, Jelinek R, **Lazarovici P.** Pardaxin, a fish toxin peptide interaction with a biomimetic phospholipid/polydiacetylene membrane assay. **Peptides** 29:1620-5, 2008.

111. Brown MC, Staniszewska I, **Lazarovici P**, Tuszynski GP, Del Valle L, Marcinkiewicz C. Regulatory effect of nerve growth factor in alpha9beta1 integrin-dependent progression of glioblastoma. **Neuro Oncol.** 10:968-80, 2008.
112. Sterin M, Ringel I, Lecht S, Lelkes PI, **Lazarovici P**. 31P magnetic resonance spectroscopy of endothelial cells grown in three-dimensional matrigel construct as an enabling platform technology: I. The effect of glial cells and valproic acid on phosphometabolite levels. **Endothelium** 15:288-98, 2008.
113. Ringel I, Lecht S, Sterin M, Lelkes PI, **Lazarovici P**. 31P magnetic resonance spectroscopy of endothelial cells grown in three-dimensional matrigel constructs as an enabling platform technology: II. The effect of anti-inflammatory drugs on phosphometabolite levels. **Endothelium** 15:299-307, 2008.
114. Arien-Zakay H, Lecht S, Perets A, Roszell B, Lelkes PI, **Lazarovici P**. Quantitative Assessment of Neuronal Differentiation in Three-dimensional Collagen Gels Using Enhanced Green Fluorescence Protein Expressing PC12 Pheochromocytoma Cells. **J Mol Neurosci** 37:225-37, 2009.
115. Arien-Zakay H, Lecht S, Bercu MM, Tabakman R, Kohen R, Galski H, Nagler A, **Lazarovici P**. Neuroprotection by cord blood neural progenitors involves antioxidants, neurotrophic and angiogenic factors. **Exp Neurol.** 216:83-94, 2009.
116. Arien-Zakay H, Lecht S, Bercu MM, Amariglio N, Rechavi G, Galski H, **Lazarovici P**, and Nagler A. Interferon-gamma induced neuronal differentiation of human umbilical cord blood-derived progenitors. **Leukemia.** 23:1790-800, 2009.
117. Staniszewska I, Walsh EM, Rothman VL, Gaathon A, Tuszynski GP, Calvete JJ, **Lazarovici P** and Marcinkiewicz C. Effect of VP12 and viperistatin on inhibition of collagen receptors-dependent melanoma metastasis. **Cancer Biology and Therapy.** 8:1507-16, 2009.
118. Lecht S, Arien-Zakay H, Marcinkiewicz C, Lelkes PI, **Lazarovici P**. Nerve growth factor-induced protection of brain capillary endothelial cells exposed to oxygen-glucose deprivation involves attenuation of Erk phosphorylation. **J Mol Neurosci.** 41:183-92, 2010.
119. Lecht S, Foerster C, Arien-Zakay H, Marcinkiewicz C, **Lazarovici P** and Lelkes PI. Cardiac microvascular endothelial cells express and release nerve growth factor but not fibroblast growth factor-2. **In Vitro Cell Dev Biol.** 46:469-76, 2010.
120. Lecht S, Arien-Zakay H, Kohan M, Lelkes PI, **Lazarovici P**. Angiostatic effects of K252a, a Trk inhibitor, in murine brain capillary endothelial cells. **Mol Cell Biochem.** 339:201-213, 2010.
121. Lecht S, Arien-Zakay H, Wagenstein Y, Inoue S, Marcinkiewicz C, Lelkes PI, **Lazarovici P**. Transient signaling of Erk1/2, Akt and PLCgamma induced by nerve growth factor in brain capillary endothelial cells. **Vasc Pharmacol.** 2010 *Epub ahead of print.*
122. Leiser Y, Silverstein N, Blumenfeld A, Shilo D, Haze A, Rosenfeld E, Shay B, Tabakman R, Lecht S, **Lazarovici P** and Deutch D. The induction of tuftelin expression in PC12 cell line during hypoxia and NGF induced differentiation. **J Cell Physiol.** 2010. *Accepted for publication*

Chapters and Reviews

1. Zlotkin, E., Teitelbaum, Z., Lester, D. and **Lazarovici, P.** Toxins selective to insects derived from scorpion venoms. In: **Natural Toxins** (Eaker, D. and Wadstrom, T., eds.), pp. 637-646, Pergamon Press, New York, 1980.
2. Zlotkin, E., Lester, D., **Lazarovici, P.** and Pelhate, M. The chemistry and axonal action of two insect toxins derived from the venom of the scorpion *Buthothus judaicus*. **Toxicon** **20**: 323-331, 1982.
3. **Lazarovici, P.** and Yavin, E. Affinity purified tetanus toxin and gangliosides form aggregates in aqueous solutions and in biological membranes. In: **7th International Conference on Tetanus** (Mastroeni, P. and Nistico, G., eds.) pp. 29-48, Gargemi Publishing Co., Roma, 1985.
4. Yavin, E., **Lazarovici, P.** and Nathan, A. Molecular interactions of ganglioside receptors with tetanus toxin on solid supports, aqueous solutions and natural membranes. In: **Membrane Receptors, Dynamics and Energetics** (Wirtz, K.W.A., ed.) vol. 133, pp. 135-147, Plenum Press, New York, 1987.
5. **Lazarovici, P.**, Yavin, E. and Fedinec, A. Retrograde transport in sciatic nerves of ganglioside affinity purified tetanus toxins. In: **Neurotoxins as Tools in Neurochemistry** (Dolly, J.O., ed.) Chapter 8, pp 100-108, Ellis Horwood, Chichester, 1988.
6. **Lazarovici, P.**, Primor, N., Caratsch, C., Lelkes, P.I., Loew, L.M., Shai, Y., McPhie, P., Louini, A., Contreras, M.L., Fox, J., Shih, Y.L. and Edwards, C. Action on artificial and neuronal membranes of pardaxin, a new presynaptic excitatory polypeptide neurotoxin with ionophore activity. In: **Neurotoxins as Tools in Neurochemistry** (Dolly, J.O., ed.) Chapter 17, pp 219-240, Ellis Horwood, Chichester, 1988.
7. **Lazarovici, P.**, Yavin, E. and Fedinec, A. Two tetanus toxins with different affinities for polysialogangliosides. I. Molecular interactions with micelles, solid matrix bound glycolipids and neuronal membranes. In: **8th International Conference on Tetanus** (Nistico, G., Bizzini, B., Bytchenko, B. and Trian, R. eds.) Chapter 12, pp 92-107, Pythagora Press, Rome-Milan, 1989.
8. Fedinec, A.A., Schweizer, G.B., **Lazarovici, P.**, Yavin, E. and Bizzini, B. Two tetanus toxins with different affinities for polysialogangliosides: II. Retrograde transport in the rat sciatic nerves to the spinal cord. In: **8th International Conference on Tetanus** (Nistico, G., Bizzini, B., Bytchenko, B. and Trian, R., eds.) Chapter 15, pp 127-134, Pythagora Press, Rome-Milan, 1989.
9. Fujita, K., **Lazarovici, P.** and Guroff, G. Regulation of the differentiation of PC12 pheochromocytoma cells. In: **Regulation of Differentiation in Eukaryotic Cells - Environmental Health Perspectives** (Jaetten, A.M., ed.), vol. 80, pp 127-142, 1989.
10. **Lazarovici, P.**, Primor, N., Gennaro, J., Fox, J., Shai, Y., Lelkes, P.I., Caratsch, C.G., Raghunathan, G., Guy, H.R., Shih, Y.L. and Edwards, C. Origin, chemistry and mechanisms of action of pardaxin, a repellent, presynaptic excitatory, ionophore polypeptide. In: **Marine Toxins: Origin, Structure and Pharmacology** (Hall, S. and Strichartz, G. eds) Chapter 27, pp. 347-364, American Chemical Society Symposium Series, 418, Washington, DC, 1990.
11. **Lazarovici, P.**, Fedinec, A. and Bizzini, B. Tetanus toxin biotinylation and localization of binding sites in catecholaminergic cultures and granules. In: **Botulinum and Tetanus Neurotoxins: Neurotransmission and Biomedical Aspects** (Das Gupta, B.R. ed.) pp. 255-264, Plenum Press, New York, 1993.

12. Rasouly, D. and **Lazarovici, P.** Staurosporine, a streptomyces alkaloid toxin as a neurotropic tool. **J Toxicol Toxin Reviews** **13**: 11-23, 1994.
13. **Lazarovici, P.** Challenging catecholamine exocytosis with pardaxin, an excitatory ionophore fish toxin. **J Toxicol Toxin Reviews** **13**: 45-63, 1994.
14. Rasouly, D., Matsuda, Y. and **Lazarovici, P.** Biochemical and pharmacological properties of K252 microbial alkaloids. In: **The toxic action of marine and terrestrial alkaloids** (Blum, M.S. ed.), pp 161-190, Alaken Press, Ft. Collins, CO, USA, 1995.
15. **Lazarovici P.**, Rasouly, D., Friedman, L., Tabekman, R., Ovadia, H. and Matsuda, Y. K252a and staurosporine microbial alkaloid toxins as prototype of neurotropic drugs. In: **Natural Toxins 2: Structure, Mechanism of Action, and Detection** (Singh, B.R. and Tu, T.T. eds) Advances in Experimental Medicine and Biology. Vol. 391, pp 367-377, Plenum Press, New York, 1996.
16. Bloch-Shilderman, E., Abu-Raya, S., Rasouly, D., Furman, O., Trembovler, V., Shavit, D., Lelkes, P.I., Shohami, E., Gutman, Y. and **Lazarovici, P.** The role of calcium, protein kinase C, pertussis toxin substrates and eicosanoids on pardaxin induced dopamine release from pheochromocytoma PC12 cells. In: **Biochemical Aspects of Marine Pharmacology** (Lazarovici, P., Spira, M. and Zlotkin, E. eds). pp 158-174 Alaken Press, Ft. Collins, CO, USA, 1996.
17. Bloch-Shilderman, E., Abu-Raya, S. and **Lazarovici P.** Pardaxin. In: **Guidebook to protein toxins and their use in cell biology** (Montecucco, C. and Rappuoli, R. eds.), pp 237-239, Oxford University Press, Oxford, 1997.
18. Bloch-Shilderman, E., Abu-Raya, S. and **Lazarovici, P.** Ionophore polypeptide toxins and signal transduction. In: **Cellular and Molecular Mechanisms of Toxin Action: Toxins and Signal Transduction** (Gutman, Y. and Lazarovici, P. eds.), pp 211-232, Harwood Academic Publishers, gmbh, Amsterdam, 1997.
19. **Lazarovici P.**, Matsuda, Y., Kaplan, D. and Guroff, G. The protein kinase inhibitors K252a and Staurosporine as modifiers of neurotrophin receptor signal transduction. In: **Cellular and Molecular Mechanisms of Toxin Action: Toxins and Signal Transduction** (Gutman, Y. and Lazarovici, P. eds.) pp 69-93, Harwood Academic Publishers gmbh, Amsterdam, 1997.
20. **Lazarovici, P.** Tetanus toxin as a valuable pharmacological tool for studying polysialogangliosides in neuronal signal transduction. In: **Secretory Systems and Toxins** (Linial, M., Grasso, A. and Lazarovici, P. eds.) pp 149-171, Harwood Academic Publishers, gmbh., Amsterdam, 1998.
21. Abu-Raya, S., Bloch-Shilderman, E., Jiang, H., Adermann, K., Schefer, E. M., Goldin, E., Yavin, E. and **Lazarovici, P.** Cellular signaling in PC12 affected by Pardaxin. In: **Natural and Selected Synthetic Toxins - Biological Implications** (Tu, A.T. and Gaffield, W. eds.) pp 22-42, American Chemical Society Symposium Series, 745, Washington, DC, 2000.
22. Weinstock, M., Kirschbaum-Slager, N., **Lazarovici, P.**, Bejar, C., Youdim, M. B. H. and Shoham, S. Neuroprotective effects of novel cholinesterase inhibitors derived from Rasagiline as potential anti-Alzheimer drugs. In: **Neuroprotective Agents** (Slikker, W. and Trembly, B. eds). Annals of the New York Academy of Science, Vol 939, pp 148-161. The New York Academy of Science, NY, 2001.
23. **Lazarovici, P.** Chimeric neurotoxins - a molecular neurosurgery approach. In: **Chimeric Toxins: Mechanisms of Action and Therapeutic Applications** (Lorberboum-Galski, H. and **Lazarovici, P.** eds.) pp.168-178, Taylor and Francis Books Ltd., London, 2002.

24. **Lazarovici, P.** The structure and function of pardaxin. **J Toxicol Toxin Reviews** **21**: 391-421, 2002.
25. **Lazarovici, P.** Pardaxins, pore-forming neurotoxins as pharmacological tools in dissecting neurotransmitter exocytosis and neurotoxicity. In: **Pore-forming Peptides and Protein Toxins** (Menestrina, G., Serra, M.D. and **Lazarovici, P.** eds.) pp.178-208, Taylor and Francis Books Ltd., London, 2003.
26. Tabakman, R., Lecht, S. and **Lazarovici, P.** Neuroprotection by monoamine oxidase B inhibitors: a therapeutic strategy for Parkinson's disease? **Bioessays** **26**: 80-90, 2004.
27. Tabakman, R., Lecht, S., Sephanova, S., Arien-Zakay, H. and **Lazarovici, P.** Interactions between the cells of the immune and nervous system: neurotrophins as neuroprotection mediators in CNS injury. **Prog Brain Res** **146**: 387-401, 2004.
28. Tabakman, R., Jiang, H., Shahar, I., Arien-Zakay, H., Levine, R.A. and **Lazarovici, P.** Neuroprotection by NGF in the PC12 in vitro OGD model: involvement of mitogen-activated protein kinases and gene expression. In: **Neuroprotective Agents** (Slikker, W. and Trembly, B. eds). Annals of the New York Academy of Science, Vol , pp . The New York Academy of Science, NY . 1053: 84-96, 2005.
29. **Lazarovici, P.**, Marcinkiewicz, C., and Lelkes, P.I. Cross talk between the cardiovascular and nervous systems: angiogenic and neurotrophic effects of vascular endothelial growth factor (VEGF) and nerve growth factor (NGF)-implications in drug development. **Cur Pharm Des** **12**: 2609-2622. 2006.
30. **Lazarovici, P.**, Li, M., Perets, A., Mondrinos, M.J., Lecht, S., Koharski, C.D., Bidez, P.R., Finck, C.M. and Lelkes, P.I. Intelligent biomatrices and engineered tissue constructs: in vitro models for drug discovery and toxicity testing. In: **Drug testing in vitro: breakthroughs and trends in cell culture technology** (Marx U., and Sandig V. eds.) chapter1, pp. 3-51. Wiley-VCH Verlag GmbH & Co KGaA, Weinheim, 2006.
31. Lecht, S., Haroutinian, S., Hoffman, A. and **Lazarovici P.** Rasagiline – a novel MAO B inhibitor in Parkinson’s disease therapy. **Therapy Clin Risk Management** **3**: 1-8, 2007.
32. Lecht, S., Foerster, C., Krilovetsky, I., Marcinkiewicz, C., Lelkes, P.I. and **Lazarovici, P.** Differential expression of bFGF in brain and cardiac capillary endothelial cells. In: **8th world Congress for Microcirculation proceedings** (Milwaukee, WI, USA) (JH Lombart, eds), pp. 33-36. Medimond S.r.l. Bologna, Italy. 2007.
33. Lecht, S., Puxeddu, I., Levi-Schaffer, F., Reich, R., Davidson, B., Schaefer, E., Mercinkiewicz, C., Lelkes, P.I. and **Lazarovici P.** Nerve growth factor – a neurotrophin with angiogenic activity. In: **Angiogenesis: basic science and clinical applications** (ME Maragoudakis and E Papadimitriou, eds) pp 99-113, Transworld Research Network, Kerala, India 2007.
34. Amin, R., Artmann, T., Artmann, G., **Lazarovici, P.**, and Lelkes, P.I. Permeability of an In Vitro Model of Blood Brain Barrier (BBB). In: **IFMBE Proceedings 13th International Conference on Biomedical Engineering** (Teck Lim, C. and Goh, JCH, eds) Volume 23, pp 81-84. Springer Berlin Heidelberg, 2009.

Books

1. Biochemical Aspects of Marine Pharmacology (**Lazarovici, P.**, Spira, M. and Zlotkin, E.eds.) Alaken Press, Ft. Colins, CO., USA, 1997. ISBN 1-880293-07-2
2. Toxins and Signal Transduction (Gutman, Y. and **Lazarovici, P.**eds) **Cellular and Molecular Mechanisms of Toxin Action** (**Lazarovici, P.**, Series ed.), Harwood Academic Publishers, Amsterdam, 1997. ISBN 90-5702-078-5.
3. Secretory Systems and Toxins (Linial, M., Grasso, A. and **Lazarovici, P.** eds) **Cellular and Molecular Mechanisms of Toxin Action** (**Lazarovici, P.**, Series ed), Harwood Academic Publishers, gmbh., Amsterdam, 1998. ISBN 90-5702-335-0
4. Site-Selective Neurotoxicity (Lester, D.S., Slikker, W.Jr. and **Lazarovici, P.** eds) **Cellular and Molecular Mechanisms of Toxin Action** (**Lazarovici, P.**, Series editor), pp308; Taylor and Francis, London, 2002. ISBN 0-415-27346-3
5. Chimeric Toxins: Mechanisms of Action and Therapeutic Applications (Lorberboum-Galski, H. and **Lazarovici, P.** eds) **Cellular and Molecular Mechanisms of Toxin Action** (**Lazarovici, P.**, Series editor), pp271; Taylor and Francis, London, 2002. ISBN 0-415-28386-8
6. Pore-forming Peptides and Protein Toxins (Menestrina, G., Serra, M.D. and **Lazarovici, P.** eds.) **Cellular and Molecular Mechanisms of Toxin Action** (**Lazarovici, P.**, Series editor), pp315; Taylor and Francis, London, 2003. ISBN 0-415-29852-0

Patents

- 2006 Adams, D., Lelkes, P.I., Li, M., Perets, A., Pobleto, H. and Lazarovici, P. Three dimensional scaffolds for tissue engineering made by processing complex extracts of natural extracellular matrices. International application No. PCT/US2006/023813
- 2009 Lalush, L., Portnoy, E., Lecht, S., Lazarovici, P., and Magdassi, S. Preparation of FDA-approved NIR fluorescent nanoparticles for targeted in vitro, ex vivo, in situ and in vivo imaging applications. International application. Submitted.

Abstracts

1. **Lazarovici, P.** and Pener, M.P. Juvenile hormones and completion of oocyte development in the african migratory locust, *Locusta migratoria migratorioides*. **11th United Scientific Symposium**, Bar Ilan, Israel, p. 63, 1977.
2. **Lazarovici, P.**, Lester, D. and Zlotkin, E. Isolation of direct lytic factors from the venom of the chactoid scorpion *Scorpio maurus palmatus*. **Israel J. Zool. 28**: 61-62 (1979).
3. **Lazarovici, P.**, Lester, D., Menashe, M., Hochman, J. and Zlotkin, E. Phospholipases and direct lytic factors (DLFs) derived from the venom of the scorpion *Scorpio maurus palmatus* (Scorpionidae). **Toxicon 17**: 97, 1979.
4. Zlotkin, E., Teitelbaum, Z., Lester, D. and **Lazarovici, P.** Toxins selective to insects derived from scorpion venoms. **EMBO Meeting: Neurotoxins, structure and function**. Nice, France. **Toxicon 17**: 208, 1979.
5. **Lazarovici, P.** and Zlotkin, E. Toxins specifically active to arthropods and mammals from the venom of the scorpion *Scorpio maurus palmatus* (Scorpionidae). **Israel J. Zool. 30**: 111, 1979.
6. **Lazarovici, P.**, Lester, D., Menashe, M., Hochman, J. and Zlotkin, E. Phospholipases and direct lytic factors derived from the venom of *Scorpio maurus palmatus* (Scorpionidae). **Israel J. Zool. 30**: 112, 1981.
7. **Lazarovici, P.** and Zlotkin, E. Panoramic view of the composition and action of the venom of the scorpion *Scorpio maurus palmatus* (Scorpionidae). **Israel J. Zool. 30**: 98, 1981.
8. Zlotkin, E., Lester, D., **Lazarovici, P.** and Pelhate, M. The chemistry and axonal action of two insect toxins derived from the venom of the scorpion *Buthotus judaicus*. **Toxicon 20**: 323, 1981.
9. **Lazarovici, P.**, Yanai, P., Zlotkin, E. and Pelhate, M. Insect toxic components from the venom of a chactoid scorpion. **Toxicon 20**: 333-334, 1981.
10. **Lazarovici, P.**, Primor, N. and Breuer, E. On the repellency and toxicity of the scent of the green vegetable bug *Nezara viridula* (Pentatomidae) and its components. **Israel J. Zool. 31**: 74, 1982.
11. **Lazarovici, P.**, Shapira, D. and Shaaya, E. Determination by radioimmunoassay of ecdysteroid levels during metamorphic stages of *Ephestia cautella*. **Gen. Comp. Endocrinol. 46**: 375, 1982.
12. **Lazarovici, P.**, Shapira, D., Pisarev, V. and Shaaya, E. The effects of an insect growth regulator on metamorphosis and ecdysteroid level in *Ephestia cautella* (Wlk) (Phycitidae, Lepidoptera). **Gen. Comp. Endocrinol. 46**: 375, 1982.
13. **Lazarovici, P.** and Shaaya, E. α -Ecdysone deficiency in a juvenile hormone analogue treated larvae of the warehouse moth *Ephestia cautella*. **Israel J. Zool. 31**: 73, 1982.
14. **Lazarovici, P.**, Pisarev, V., Carmi, Y. and Shaaya, E. Detection and monitoring of phycitidae stored grain moth in a flour mill using cis-9, trans-12, tetradecadien 1-yl acetate female sex, pheromonal traps. **Israel J. Zool. 31**: 74, 1982.
15. Breuer, E. and **Lazarovici, P.** A convenient synthesis of the aggregation pheromone of *Tribolium castaneum* and *Tribolium confusum*. **Proc. 3rd**

- Israeli Meeting on Pheromone Research**, Beer Sheva, p. 4, 1982.
16. Yavin, E., Lazarovici, P., Nathan, A. and Shimon, T. Studies on tetanus toxin interaction with neural cell receptors. **Bacterial Protein Toxins**, Academic Press, pp 445-446, 1983.
 17. Lazarovici, P., and Yavin, E. Tetanus toxin interactions with human erythrocytes artificially incorporated with polysialogangliosides. **Proc. 5th EST Symposia**, Hannover, pp. 77, 1983.
 18. Lazarovici, P., Menashe, M. and Zlotkin, E. Toxicity to crustacea by polypeptide phospholipase interaction in the venom of a chactoid scorpion. **Proc. 5th EST Symposia**, Hannover, p. 76, 1983.
 19. Lazarovici, P., Primor, N., Menashe, M. and Zlotkin, E. Purification and characterization of a hypotensive phospholipase A2 and a hypertensive factor from a chactoid scorpion venom. **Proc. 1st Joint Meeting of the Israeli Societies for Life Sciences**, Jerusalem, p. A159, 1983.
 20. Lazarovici, P., and Yavin, E. Ganglioside-enriched human erythrocytes bind and form a macromolecular complex with tetanus toxin. **Proc. 1st Joint Meeting of the Israeli Societies for Life Sciences**, Jerusalem, p. A227, 1983.
 21. Lazarovici, P. and Yavin, E. Preparative isolation of ¹²⁵I-tetanus isotoxic forms using chromatofocusing. **Proc. 1st Joint Meeting of the Israeli Societies for Life Sciences**, Jerusalem, p. B200, 1983.
 22. Lazarovici, P., Primor, N. and Zlotkin, E.: Blood pressure effects and histamine release induced by a chactoid scorpion venom and its toxins. **Proc. 6th EST Symposia**, Basel, p. 15, 1984.
 23. Teichberg, V.I., Goldberg, O. and Lazarovici, P. Differential sensitivity of excitatory amino acid receptors to β -bungarotoxin and various phospholipases. **Proc. 6th EST Symposia**, Basel, p. 13, 1984.
 24. Lazarovici, P., Tayot, J.L. and Yavin, E. Affinity chromatography purification and characterization of two iodinated tetanus toxin fractions. **Proc. 1st American Symposium on Animal, Plant and Microbial Toxins. Toxicon, 23: 32**, 1985.
 25. Lazarovici, P. and Yavin, E. Tetanus toxin sequestration in synaptosomal membrane vesicles isolated from guinea pig brains. **Proc. 1st American Symposium on Animal, Plant and Microbial Toxins. Toxicon, 23: 32**, 1985.
 26. Primor, N., Lazarovici, P. and Loew, L.M. Chromatofocusing purification of pardaxins, the pore forming hydrophobic polypeptides from the Red Sea flatfish *Pardachirus marmoratus*. **Proc. 1st American symposium on Animal, Plant and Microbial Toxins. Toxicon, 23: 35-36**, 1985.
 27. Lazarovici, P. and Yavin, E.: Macromolecular complex formation of affinity purified tetanus toxin gangliosides in solution and biological membranes. **Proc. 7th International Conference on Tetanus**, pp 92-93, 1985.
 28. Teichberg, V.I., Lazarovici, P. and Goldberg, O. Excitatory amino acid receptor function as viewed from studies of Na⁺ fluxes in brain slices. **ISN Satellite Symposium on Excitatory Amino Acids**, Bournemouth, England, 1985.
 29. Lazarovici, P., Primor, N., Caratsch, C.G. and Loew, L.M. Structure and activity of pardaxin, a new presynaptic toxin, in artificial lipid membranes. **J. Cell Biochem. 10B: 66**, 1986.

30. **Lazarovici, P.** and Guroff, G. Long-term down regulation of epidermal growth factor receptors by nerve growth factor in PC12 cells. **J. Cell Biochem.** **10C**: 116, 1986.
31. **Lazarovici, P.**, Yavin, E., Fedinec, A. and Chan, K.F.J. Tetanus toxin-ganglioside interaction in neuronal systems and in vitro. **Proc. 2nd American Symposium on Animal, Plant and Microbial Toxins**, Tempe, Arizona, p. 21, 1986.
32. **Lazarovici, P.** and Chan, K.F.J. Lipid interacting cytotoxins alter binding properties of epidermal growth factor (EGF) and tumor promoter (PDBu) receptors in rat pheochromocytoma (PC12) and human carcinoma (A431) cells. **Proc. 2nd American Symposium on Animal, Plant and Microbial Toxins**, Tempe, Arizona, p. 24, 1986.
33. **Lazarovici, P.**, Kuzuya, H., Dickens, G. and Guroff, G. Long-term down regulation of EGF-dependent tyrosine kinase activity in PC12 cells. **Federation Proceedings** **45**: 1792, 1986.
34. Fedinec, A.A., **Lazarovici, P.**, Yavin, E. and Bizzini, B. Two ¹²⁵I-tetanus toxins with different affinities for gangliosides: retrograde transport in the rat sciatic nerves. **Proc. American Chemical Society, Symposium on Natural Toxins**, Denver, Colorado, 1986.
35. **Lazarovici, P.**, Yanai, P. and Yavin, E. Affinity purified tetanus neurotoxin with guinea pig synaptic membrane preparations: properties and evidence for a protease sensitive, receptor component. **Proc. Soc. Neurosci.** **12**: 94, 1986.
36. **Lazarovici, P.**, Yanai, P. and Yavin, E. Molecular interactions between micellar polysialogangliosides and affinity purified tetanotoxins in aqueous solutions. **Federation Proceedings** **46**: 1928, 1987.
37. Koizumi, S., Contreras, M., Matsuda, Y., **Lazarovici, P.** and Guroff, G. K252a: a specific inhibitor of the action of nerve growth factor on PC12 cells. **Proc. Soc. Neurosci.** **13**: 551, 1987.
38. **Lazarovici, P.**, Caratsch, C. and Primor, N. Action of pardaxin, a new presynaptic excitatory neurotoxin with ionophore activity on neuromuscular junction, synaptosomes and pheochromocytoma PC12 cells. **Neurotoxins as Tools in Neurochemistry**, p. 13, LaGuaira, Venezuela, 1987.
39. **Lazarovici, P.**, Yavin, E. and Fedinec, A. Ganglioside-affinity purified tetanus neurotoxins: molecular interactions with polysialoganglioside micells, synaptic membranes and retrograde transport in sciatic nerves. **Neurotoxins as Tools in Neurochemistry**, p. 13, LaGuaira, Venezuela, 1987.
40. Chan, K.F.J. and **Lazarovici, P.** *Staphylococcus aureus* α -toxin. I. Effect on protein phosphorylation in myelin. **Neurotoxins as Tools in Neurochemistry**, p. 25, LaGuaira, Venezuela, 1987.
41. **Lazarovici, P.**, Contreras, M.L. and Chan, K.F.J. *Staphylococcus aureus* α -toxin. II. Reduction of epidermal growth factor receptor affinity in PC12 cells. **Neurotoxins as Tools in Neurochemistry**, p. 25, Laguaira, Venezuela, 1987.
42. **Lazarovici, P.**, Yavin, E. and Fedinec, A. Two tetanus toxins with different affinities for polysialogangliosides. I. Molecular interactions with micelles, solid matrix bound glycolipids and neuronal membranes. **8th International Conference on Tetanus**, Leningrad, 1987.
43. Fedinec, A.A., Schweizer, G.B., **Lazarovici, P.**, Yavin, E. and Bizzini, B. Two tetanus toxins with different affinities for polysialogangliosides: II.

- Retrograde transport in the rat sciatic nerves to the spinal cord. **8th International Conference on Tetanus**, Leningrad, 1987.
44. **Lazarovici, P.**, Primor, N., Lelkes, P., Fox, J., Shai, Y., McPhie, P., Shih, Y.L. and Edwards, C. Pardaxin interaction with artificial membranes: sequence determination, toxin conformational changes and phosphatidylserine vesicles aggregation. **Natural Toxins from Aquatic and Marine Environments**, Woods Hole, Massachusetts, 1987.
 45. Shih, Y.L., **Lazarovici, P.**, McPhie, P. and Edwards, C. Ionic selectivities of the voltage-dependent channels produce by pardaxin, a marine toxin. **Biophysical J.** **53**: 53a, 1988.
 46. Fujita, K., Guroff, G., Yavin, E. and **Lazarovici, P.** Preparation of affinity purified, biotinylated tetanus toxin and characterization of cell surface binding sites on nerve growth factor-treated PC12 cells. **FASEB J.** **2**: A320, 1988.
 47. **Lazarovici, P.**, Primor, N., Shai, Y., Caratsch, C.G., Fox, J., Guy, H.R., Shih, Y.L. and Edwards, C. Synthesis of pardaxin neurotoxin with ionophore activity. **FASEB J.** **2**: A1773, 1988.
 48. **Lazarovici, P.**, Levi, B.Z., Koizumi, S., Fujita, K., Abe, Y., Ozato, K., Matsuda, Y. and Guroff, G. K252a inhibits the induction of the proto-oncogene c-fos by nerve growth factor (NGF) but not by epidermal growth factor (EGF) in PC12 cells. **FASEB J** **2**: A1773, 1988.
 49. Contreras, M.L., Fujita, K., Lelkes, P., Shiloach, J., Guroff, G. and **Lazarovici, P.** The effects of pertussis toxin on nerve growth factor-stimulated responses in P12 cells. **Proc Soc Neurosci**, 1988.
 50. Nakabayashi, H., **Lazarovici, P.** and Huang, K.P. Inhibition of protein kinase C by mast cell degranulating peptide. **Proc Soc Neurosci**, 1988.
 51. Hochman, J., **Lazarovici, P.** and Park, S.S. The use of immunogenic cell variants to raise monoclonal antibodies against parental malignant lymphoma cells. **UICC Meeting**, Jerusalem, Israel, 1988.
 52. Lelkes, P.I., Munoz, A. and **Lazarovici, P.** Endothelial cells and secretory cells in coculture: modulation of growth hormone receptors and protein expression. **American Cell Biology Meeting**, San Francisco, USA, 1988.
 53. **Lazarovici, P.**, Levi, B.Z., Guroff, G. Heterologous down regulation of EGF receptors in PC12 cells differentiated by NGF. **Pflugers Archive - Europ. J. Physiol.** **413** (S1), R16, 1989.
 54. **Lazarovici, P.**, Koizumi, S., Contreras, M.L., Levi, B.Z., Lelkes, P.I., Fujita, K., Hama, T., Matsuda, I., Ozato, K. and Guroff, G. K252a, the first specific inhibitor of the action of nerve growth factor on PC12 cells. **Pflugers Archive - Europ. J. Physiol.** **413** (S1), R16, 1989.
 55. Fujita, K., Guroff, G., Yavin, E., Goping, G., Orenberg, R. and **Lazarovici, P.** Preparation of affinity purified, biotinylated tetanus toxin and characterization and localization of cell surface binding sites on nerve growth factor-treated PC12 cells. **5th Int. Symp. on Chromaffin Cell Biology**, p. 102, Jeruslaem, 1989.
 56. **Lazarovici, P.**, Fujita, K., Contreras, M.L., DiOrio, J.P. and Lelkes, P.I. Affinity purified tetanus toxin binds to isolated chromaffin granules and inhibits catecholamine release in digitonin permeabilized chromaffin cells. **5th Int. Symp. on Chromaffin Cell Biology**, p. 102, Jeruslaem, 1989.
 57. **Lazarovici, P.** Visualization of G1b polysialogangliosides on nerve growth factor treated PC12 cells and chromaffin granules using an affinity purified,

- biotinylated tetanus toxin. **Proc. Xth Int. Symp. on Glycoconjugates**, p. 42, Jerusalem, 1989.
58. **Lazarovici, P.** K252a, a kinase inhibitor, blocks c-fos transcription and the increase in intracellular calcium produced by nerve growth factor in PC12 cells. **Reviews in Clinical and Basic Pharmacology** vol. **8** (suppl), Freund Publishing House, 1989.
59. **Lazarovici, P.** *Staphylococcus aureus* α -toxin activates phospholipases and induces a Ca^{2+} influx in sympathetic neuronal cultures. **Reviews in Clinical and Basic Pharmacology** vol. **8** (suppl), Freund Publishing House, 1989.
60. Lelkes, P.I., Jason, M., Sevcik, S., Munoz, A. and **Lazarovici P.** Endothelial cells induce organospecific differentiation of neuroendocrine cells. **Symp. on the Development of the Vascular System**. Madison, Wisconsin, USA, 1989.
61. Lelkes, P.I., Janson, M., Sevcik, S., Mizrachi, Y., Munoz, A. and **Lazarovici, P.** The possible role of endothelial cells in organospecific differentiation of neuroendocrine cells. **Symp. on the Development of the Vascular System**. Madison, Wisconsin, USA, 1989.
62. **Lazarovici, P.** Affinity purified tetanus toxin inhibits catecholamine release in permeabilized chromaffin cells and binds to chromaffin granules. **Proceedings XIVeme Conference en Neurobiologie de GIF, CNRS**, Paris, 1990.
63. **Lazarovici, P.** Tetanus toxin biotinylation and localization of binding sites in sympathetic neurons in culture. **200th American Chemical Society Meeting Proceedings**, Washington, DC, 1990.
64. Raghunathan, G., Aurell, S.R., **Lazarovici, P.** and Guy, H.R. Tim barrel structural models of pardaxin channels. **Biophysical J** (suppl.), 1990.
65. Shi, Y., **Lazarovici, P.** and Edwards, C. Single-channel current induced by native and synthetic pardaxin in the lipid bilayer at the tip of patch pipettes. **Toxin Reviews 9**: 87, 1990.
66. Hochman, J., Park, S., **Lazarovici, P.**, Bergel, M. and Gotesman, M. Monoclonal antibodies to immunogenic lymphoma cells variants displaying impaired neoplastic properties. **J Cancer Res and Clin Oncology**, vol. **116**, p. 325, 1990.
67. Rudkin, B.B., **Lazarovici, P.**, Levi, B.Z., Abe, Y., Fujita, K. and Guroff, G. Cell cycle-specific action of nerve growth factor in PC12 cells: differentiation without proliferation. **J Cell Biochem** (suppl.), 14F, p 95, 1990.
68. Marsal, J., Arribas, M., Blasi, J., Solsona, C. and **Lazarovici, P.** Action of pardaxin on acetylcholine release from Torpedo electric organ synaptosomes. **Neurotoxins in Neurobiology** (IPICS, Piriapolis, Uruguay), 1990.
69. Rasouly, D., Matsuda, Y. and **Lazarovici, P.** Neurotoxic-protein kinases inhibitors as modulators of neuronal differentiation. *Neurotox 91*, p 91 **Molecular Basis of Drug and Pesticide Action**, 1991.
70. Shavit, D., Oshima, M., Fink, D., Guroff, G., Levi, B.Z. and **Lazarovici, P.** Nerve growth factor (NGF) induced heterodown regulation of epidermal growth factor (EGF) receptors in PC12 cells is post-transcriptional. **Proc. 15th Int. Congress of Biochemistry**, p. 224, 1991.
71. **Lazarovici, P.** Tetanus toxin biotinylation and localization of binding sites in sympathetic neuronal cultures and granules. **Proc. 15th Int. Congress of Biochemistry**, p. 237, Jerusalem, 1991.

72. Rasouly, D., Matsuda, Y. and **Lazarovici, P.** Staurosporine, a protein kinase C inhibitor partially mimicks nerve growth factor (NGF) neurotropic effects. **Proc. 15th Int. Congress of Biochemistry**, p. 279, Jerusalem, 1991.
73. Rasouly, D., Lester, D., Matsuda, Y. and **Lazarovici, P.** Staurosporine neurotropic effects in PC12 cells are independent of protein kinase C. **Neuroscience Proceedings** vol 17(2), 5984, **21st Ann. Meeting of American Society of Neuroscience**, 1991.
74. Shavit, D., Oshima, M., Fink, D., Guroff, G., Levi, B.Z. and **Lazarovici, P.** Regulation of EGF receptors by NGF in PC12 cells. **Proceeding 6th Int. Symp. Chromaffin Cell. Biology**, Jerusalem, 1991.
75. **Lazarovici, P.** Tetanus toxin biotinylation and localization of binding sites in sympathetic neuronal cultures and granules. **Proc. IXth Int. Congress on Tetanus and anti-infectious defense**, 1991.
76. **Lazarovici, P.** K252a: a specific inhibitor of the action of nerve growth factor on PC12 cells. **Proc. 2nd Israel Cancer Research Fund Conference**, 1991.
77. **Lazarovici, P.** Nerve growth factor receptors signal transduction in pheochromocytoma differentiation. **J. Basic and Clin. Physiol. Pharmacol. 2**: B33, 1992.
78. Shavit, D., Oshima, M., Fink, D., Guroff, G. and **Lazarovici, P.** Regulation of epidermal growth factor (EGF) in PC12 sympathetic neurons. **J. Basic and Clin. Physiol. Pharmacol. 2**: B35, 1992.
79. Rasouly, D. and **Lazarovici, P.** Staurosporine - a protein kinase C (PKC) inhibitor with neurotropic effects on PC12 cells. **J. Basic and Clin. Physiol. Pharmacol. 2**: B34, 1992.
80. Lelkes, P.I., Unsworth, B.R., Zuniga, R., Elejalde, B.R., Shavit, D. and **Lazarovici, P.** Altered growth factor receptor levels in hybrids derived from adrenomedullary endothelial and parenchymal parental cells. **FASEB meeting**, USA, 1992.
81. Shavit, D., **Lazarovici, P.** and P.I., Lelkes. Hybrids derived from adrenomedullary endothelial cells and pheochromocytoma PC12 cells lack epidermal growth factor receptors. **J. Basic and Clin. Physiol. Pharmacol. 3**: 40, 1992.
82. Rasouly, D and **Lazarovici, P.** Binding characteristics of the kinase inhibitor staurosporine to pheochromocytoma PC12 cells suggest a possible uptake process. **J. Basic and Clin. Physiol. Pharmacol. 3**: 36, 1992.
83. **Lazarovici, P.** Pardaxin evokes exocytotic catecholamine and ATP release from chromaffin cells independent of intracellular calcium. **J. Basic and Clin. Physiol. Pharmacol. 3**: 25, 1992.
84. Abu-Raya, S., Trembovler, V., Shohami, E. and **Lazarovici, P.** Prostaglandins release and calcium influx in pheochromocytoma PC12 cultures exposed to anoxia and toxins insults. **J Basic and Clin Physiol Pharmacol 3**: 2, 1992.
85. **Lazarovici, P.** and J. Hochman. Fluorescence activated cell sorting (FACS) and immunomagnetic separation (IMACS) of nonmalignant variants and parental malignant mouse lymphoma cells. **Proc. 2nd Jerusalem Conf. on Pharm. Sci. and Clin. Pharmacol.** p. 27, Jerusalem, Israel, 1992.
86. Oshima, M., Shavit, D., Fink, D., **Lazarovici, P.** and Guroff, G. The mechanism of nerve growth factor-induced long-term heterodown regulation of the epidermal growth factor receptors in PC12 cells. **Neurosciences**

- Proceedings vol 18, 22th Ann Meetings of American Society of Neuroscience**, 1992.
87. Arribas, M., Blasi, J., **Lazarovici, P.** and Marsal, J. Botulinum blockade of acetylcholine release is antagonized by pardaxin, an excitatory neurotoxin. **5th Int. Congress on Cell Biology**, Madrid, Spain, 1992.
 88. Arribas, M., Blasi, J., **Lazarovici, P.** and Marsal, J. Pardaxin antagonizes poisoning of cholinergic synaptosomes by botulinum toxin type A. **Toxicon** **31**: 510, 1993.
 89. Abu-Raya, S., Trembovler, V., Shohami, E. and **Lazarovici, P.** Characterization of the relationship between eicosanoids and dopamine release from PC12 cells in response to pardaxin. **Annual Meeting of Israel Physiol Pharmacol Soc**, 1993.
 90. **Lazarovici, P.** Pardaxin is a new toxin tool for studying catecholamine exocytosis. **Toxicon**, **32**:386, 1994.
 91. Abu-Raya, S., Furman, O., Trembovler, V., Shohami, E. and **Lazarovici, P.** Pardaxin-induced arachidonic acid and eicosanoids release in PC12 cells as a cellular model of inflammation. **Proc Israel Endocrine Soc**, 1993.
 92. Shavit, D., Oshima, M., Fink, D., Guroff, G. and **Lazarovici, P.** The mechanism of heterodown regulation of epidermal growth factor receptors in PC12 cells induced by nerve growth factor and its high affinity trk receptors. **Proc Israel Soc Biochem and Molec Biol**, 1994.
 93. Friedman, L., Rasouly, D., Weinstock, M. and **Lazarovici, P.** Phorbol ester increased levels of alzheimer precursor protein in pheochromocytoma PC12 cells is inhibited by staurosporine. **Proc Israel Soc Biochem and Molec Pharmacol**, 1994.
 94. Rasouly, D. and **Lazarovici, P.** Staurosporine induces the tyrosine phosphorylation of a 145 kD protein concomitant with its neurotrophic effects in PC12 cells. **Proc Israel Soc Biochem and Molec Pharmacol**, 1994.
 95. Rasouly, D., Rahamim, E., Ringel, I., Ginsburg, I., Muarakata, C., Matsuda, Y. and **Lazarovici, P.** Staurosporine-induced neurites in PC12 cells contain high levels of tau-microtubule associated proteins and are resistant to colchicine. **Proc Israel Soc Biochem and Molec Pharmacol**, 1994.
 96. Abu-Raya, S., Bloch, E., Trembovler, V., Shohami, E. and **Lazarovici, P.** Pardaxin induced release of eicosanoids and ³H-dopamine from PC12 cells is independent of extracellular calcium. **Proc Israel Soc Biochem and Molec Pharmacol**, 1994.
 97. Abu-Raya, S., Trembovler, V., Shohami, E. and **Lazarovici, P.** A tissue culture ischemic device to study eicosanoids release by pheochromocytoma PC12 cultures. **Proc Israel Soc Biochem and Molec Pharmacol**, 1994.
 98. Abu-Raya, S., Bloch, E., Trembovler, V., Shohami, E. and **Lazarovici, P.** Lipoxygenase products as modulators of pardaxin-induced, calcium-independent dopamine release from PC12 cells. **Prostaglandins and Related Compounds**, p. 113, 1994.
 99. Sadot, E., Barg, J., **Lazarovici, P.** and Ginsburg, I. Short-term and long term regulation of tau in PC12 cells: two different mechanisms. **Proc. Israel Soc. Neurosci.**, p. 46, 1994.
 100. **Lazarovici, P.**, Rasouly, D., Bajayo, N. and Matsuda, Y. Neuronal signal transduction therapy: K252 family of neurotrophins modulators as prototype drugs to cure neurodegenerative disorders. **Biotech Int**, 1994.

101. Abu-Raya, S., Bloch-Shilderman, E., Trembovler, V., Shohami, E., Gutman, Y. and **Lazarovici, P.** Pardaxin, a pharmacological tool to study mechanisms of catecholamine secretion from PC12 cells. **Marine Pharmacological Symp**, 1994.
102. Rasouly, D., Ringel, I., Ginzburg, I., Rahamim, E., Kaplan, D., Lester, D., Friedman, L., Matsuda, Y. and **Lazarovici, P.** Mechanisms of action of staurosporine, a microbial derived kinase inhibitor inducing neurotrophic effects in PC12 cells. **Toxicon**, **33**: 273, 1995.
103. **Lazarovici, P.** Pardaxin, a new pharmacological ionophore tool for studying catecholamine exocytosis. **Toxicon**, **33**: 278, 1995.
104. Tabakman, R., Ovadia, H., Rasouly, D., Matsuda, Y. and **Lazarovici, P.** K252a, a streptomyces toxin alkaloid delays the experimental autoimmune encephalomyelitis (EAE) symptoms in SJL/J mice. **Toxicon**, **33**: 289, 1995.
105. Ellern, O., Shohami, E. and **Lazarovici, P.** Search for neuroprotective drugs using PC12 pheochromocytoma cultures treated with cytotoxic concentrations of pardaxin. **Toxicon**, **33**: 294, 1995.
106. Bloch-Shilderman, E., Rasouly, D., Shavit, D., Gutman, Y. and **Lazarovici, P.** The role of calcium, protein kinase C and pertussis toxin substrates in pardaxin-induced dopamine release from PC12 cells. **Toxicon**, **33**: 299-300, 1995.
107. Friedman, L., Rasouly, D., Weinstock, M. and **Lazarovici, P.** Staurosporine, an alkaloid toxin known as protein kinase inhibitor, suppressed phorbol ester effects on Alzheimer precursor protein levels in PC12 cells. **Toxicon**, **33**: 305, 1995.
108. **Lazarovici, P.** and Galski, H. KT-5720, a new bacterial alkaloid antibiotic reverses multidrug resistance (MDR) in lymphoma and carcinoma cells overexpressing MDR1 gene. **Proc Am Chem Soc**, p. 53, 1996.
109. **Lazarovici, P.**, Whalin, M., Jiang, H., Kaplan, D. and Guroff, G. Staurosporine induces neurite outgrowth and stimulates pp60src by trk- and ras- independent signal transduction pathway. **Proc. Am. Soc. for Neurosci**, **22**: 557, 1996.
110. Shibusatani, M., Kim, E., **Lazarovici, P.**, Oshima, M. and Guroff, G. Preparation of a cell-free translation system from PC12. **Proc. Am. Soc. for Neurosci**, **22**: 554, 1996.
111. Jiang, H., **Lazarovici, P.**, Movsesyan, V., Fasler, M., Whalin, M., Katagini, Y., Monshipouri, M., Dickens, G., Lelkes, P.I. and Guroff, G. Expression of human trk A receptors in trk A-deficient PC12/endothelial hybrid cells (PC12EN) results in NGF induced DNA synthesis. **Proc Am Soc for Neurosci**, **22**: 1009, 1996.
112. **Lazarovici, P.**, Matsuda, Y. and Rasouly, D. K252a and staurosporine fungal alkaloid toxins as prototypes of neurotropic drugs. **Proc Am Chem Soc**, p. 53 Denver, Colorado, 1996.
113. **Lazarovici, P.** The protein kinase inhibitors K252a and staurosporine as modifiers of neurotrophin receptor signal transduction. **Isr J Med Sci** **32**: S16, 1996.
114. Nikodijevici, B., Dickens, G., Kozak, A., Jiang, H., **Lazarovici, P.** and Guroff, G. The characteristics of nerve growth factor-stimulated calcium uptake into PC12 cells. **The 1st-internet meeting of NIH** (visiting number 000006), 1997.
115. Monshipouri, M., Katagiri, Y., **Lazarovici, P.**, Jiang, H. and Guroff, G.

- Impaired erk phosphorylation due to a single mutation in human trk A transmembrane domain. **Proc Am Soc for Neurosci** **23**: 137.12, 1997.
116. Abu-Raya, S., Bloch-Shilderman, E., Trembovler, V., Shohami, E., Gutman, Y. and **Lazarovici, P.** Pardaxin, a new pharmacological tool to stimulate the arachidonic acid cascade in PC12 cells. **Proc. Int Symp. Signal Transd. in Health and Disease (STUDY)**. p. 42, Tel-Aviv, 1997.
 117. Rasouly, D., Shavit, D., Zuniga, R., Eljalde, R.B., Unworth, B.R., Yayon, A., **Lazarovici, P.** and Lelkes, P.I. Staurosporine induces neurite outgrowth in neuronal hybrids (PC12EN) lacking NGF receptors. **STUDY**, p. 42, Tel-Aviv, 1997
 118. **Lazarovici, P.**, Jiang, H., Movsesyan, V., Fink, D.W., Fasler, M., Whalin, M., Monshipouri, M., Dickens, G., Lelkes, P.I. and Guroff, G. Expression of human p140 trk receptors in p140trk deficient PC12/endothelial (PC12EN) cells results in NGF-induced signal transduction and DNA synthesis. **STUDY**, p. 143, Tel-Aviv, 1997.
 119. **Lazarovici, P.**, Oshima, M., Shavit, D., Shibutani, M., Jiang, H., Monshipouri, M., Fink, D.W., Movsesyan, V., and Guroff, G. Down-regulation of EGF receptors by NGF in PC12 cells is p140trk-, Ras-, and Src-dependent. **STUDY**, p. 143, Tel-Aviv, 1997.
 120. **Lazarovici, P.**, Jiang, H., St. Ulme, D., Dickens, G., Chabuck, A., Lavarreda, M. and Guroff, G. Both p140trk and p75NGFR nerve growth factor receptors mediate NGF-stimulated calcium uptake. **STUDY**, p.44, Tel-Aviv, 1997.
 121. Ohnona, S., Wallin, M., Jiang, H., Movsesyan, V., Shaffer, E.M., Fink, A., Kaplan, D., Guroff, G. and **Lazarovici, P.** Staurosporine induces neurite outgrowth in PC12 variant cell lines by trk A-, Ras-, and Src- independent signal transduction pathways. **STUDY**, p. 44, Tel-Aviv, 1997.
 122. Abu-Raya, S., Block-Shilderman, E., Trembovler, V., Shohami, E., Gutman, Y. and **Lazarovici, P.** Pardaxin, a new pharmacological tool to stimulate the arachidonic acid cascade in PC12 cells. **Neurosci Lett Suppl**, 48, S30, 1997.
 123. **Lazarovici, P.**, Oshima, M., Shavit, D., Shibutani, M., Jiang, H., Monshipouri, M., Fink, D.W., Movsesyan, V., and Guroff, G. Down-regulation of EGF receptors by NGF in PC12 cells is Trk-, Ras-, and src-dependent. **Neurosci Lett Suppl**, 48, S31, 1997.
 124. Abu-Raya, S., Block-Shilderman, E., Yedgar, S., Jiang, H., and **Lazarovici, P.** Cellular signaling in PC12 cells affected by pardaxin. **216th Proc Am Chem Soc**, p. 140, Boston, 1998.
 125. Abu-Raya, S., Block-Shilderman, E. and **Lazarovici, P.** Cellular signaling in PC12 cells affected by pardaxin. **Proc Israel Soc Physiol Pharmacol** Ma'ale Hahamisha, E4, 1998.
 126. **Lazarovici, P.**, Shibutani, M., Jiang, H., Katagiri, Y. and Guroff, G. Down-regulation of EGF receptors by NGF in PC12 cells is p140trk-, Ras-, and src-dependent. **5th IUBMB Conference on the Biochemistry of Health and Disease**, Jerusalem, 1998.
 127. **Lazarovici, P.**, Jiang, H. and Fink, D. W. PACAP 38 induced neurite outgrowth in PC12 cells is PKC and ERK- dependent. **Proc. Soc. Neurosci.**, **24**:1045, Los-Angeles, 1998.
 128. Adermann, K., Weiss, A., **Lazarovici, P.**, Hochman, J. and Wellhoner, H. Novel isoform of pardaxin: structure, synthesis, biological action and

- accumulation of acyl-pardaxin in the nucleoli of NG108-15 neurohybridoma and chromaffin cells. **2^d Lower-Saxony-Israel Symposium on the Life Sciences**, Jerusalem, 1999.
129. Abu-Raya, S., Trembovler, V., Shilderman-Bloch, E. and **Lazarovici, P.** Rasagiline protects PC12 cells from oxygen deprivation. **Parkinsonism and Related Disorders**, **5**: S67. Vancouver, 1999.
 130. Abu-Raya, S., Trembovler, V., Shohami, E., **Lazarovici, P.** An *in-vitro* oxygen-glucose deprivation model for the development of neuroprotective compounds. **Neurosci Letters**, **54**: S1, 1999.
 131. Moalem, G., Gdalyahu, A., Leibowitz-Amit, R., Yoles, E., Muller-Gilor, S., Shani, Y., Mor, F., Otten, U., **Lazarovici, P.**, Cohen, I.R. and Schwartz, M. Neuroprotection by autoimmune T cells in injured central nervous system involves T cell – derived neurotrophins. **Neurosci Letters**, **54**: S30, 1999.
 132. Katzir, T., Shani, J., Kaplan, D. and **Lazarovici, P.** A bioassay for NGF using PC12 cells overexpressing high affinity trkA-nerve growth factor (NGF) receptors. **Israel Soc Physiol Pharmacol** .Ma'ale Hachamisha, 1999.
 133. **Lazarovici, P.** and Fink, Jr., D. Heterologous upregulation of nerve growth factor - trkA receptors in PC12 cells by pituitary adenylate cyclase-activating polypeptide (PACAP). **Israel Soc Physiol Pharmacol** .Ma'ale Hachamisha, 1999.
 134. Trembovler, V., Abu-Raya, S., **Lazarovici, P.** and Shohami, E., Toxic effects of TNF enhanced by reactive oxygen species. **Restorative Neurology and Neuroscience** 16, p. 159, 2000.
 135. Abu-Raya, S., Blaugrund, E., Trembovler, V., and **Lazarovici, P.** Rasagiline a novel monoamine oxidase-B inhibitor, with neuroprotective effects under ischemic conditions in PC12 cells. **Europ Soc Neurol** Jerusalem, Israel, 2000.
 136. Katzir, I., Shani, J. and **Lazarovici, P.** A bioassay for NGF using PC12 clones expressing different levels of trkA receptors. **The 6th Nerve growth Factor and Related Molecules Conference**, Montreal, 2000.
 137. **Lazarovici, P.** and Fink, D. Jr. Pituitary adenylate cyclase-activating polypeptide (PACAP-38) upregulates trkA expression in PC12 cells. **The 6th Nerve Growth Factor and Related Molecules Conference**, Montreal, 2000.
 138. Bloch-Shilderman, E., Jiang, H., Abu-Raya, S. Linial, M. and **Lazarovici, P.** A functional role of MAPK in pardaxin-induced dopamine release from PC12 cells. **Proc Soc Neurosci** **30**: 388, New Orleans, 2000.
 139. Bloch-Shilderman, E., Jiang, H., Abu-Raya, S. Linial, M. and **Lazarovici, P.** A functional role of MAPK in pardaxin-induced dopamine release from PC12 cells. **Neurosci Lett Suppl** **55**, S10, 2000.
 140. Abu-Raya, S., Blaugrund, E., Trembovler, V. and **Lazarovici, P.** The effect of rasagiline, selegiline and their metabolites on oxygen-glucose deprivation-induced cell death in NGF-differentiated PC12 cultures. **Neurosci. Lett. Suppl.** **55**, S1 2000.
 141. Kirschbaum-Slager, N., Abu-Raya, S., **Lazarovici, P.** and Weinstock, M. TV3326, a cholinesterase and monoamine oxidase inhibitor, protects NGF-differentiated PC12 cells against glucose-oxygen deprivation. **Neurosci Lett Suppl** **55**, S29, 2000.
 142. Trembovler, V., Abu-Raya, S., **Lazarovici, P.** and Shohami, E. Oxygen-glucose deprivation and oxidative stress-induced cytotoxicity in PC12 cells

- is ameliorated by dexanabinol (HU-211). Neurosci Lett Suppl 55, S57, 2000.
143. Bloch-Shilderman, E., Jiang, H., Abu-Raya, S., Linial, M. and **Lazarovici, P.** Mitogen-activated protein kinase is involved in pardaxin-induced dopamine release from PC12 cells. XIIIth World Congress of the International Society on Toxinology, Paris, 2000.
 144. **Lazarovici, P.**, Bloch-Shilderman, E. and Abu-Raya, S. Pardaxin, a pharmacological tool for studying neurotransmitter release. XIIIth World Congress of the International Society on Toxinology, Paris, 2000.
 145. Abu-Raya, S., Blaugrund, E., Trembovler, V. and **Lazarovici, P.** The effect of rasagiline, selegiline and their metabolites on oxygen-glucose deprivation-induced cell death in NGF-differentiated PC12 cultures. J Neurol Suppl 3, Vol. 247, III/92, 2000.
 146. **Lazarovici, P.**, Bloch-Shilderman, E. and Abu-Raya, S. Pardaxin stimulation of MAPKs: relationship to neurotransmitter release and neurotoxicity. Med Microbiol Immunol 189: 40, 2000.
 147. Bloch-Shilderman, E., Jiang, H., Abu-Raya, S., Linial, M. and **Lazarovici, P.** MAPK is involved in pardaxin-induced dopamine release from PC12 cells. Med Microbiol Immunol 189: 31, 2000.
 148. Adermann, K., Weiss, A., **Lazarovici, P.**, Hochman, J. and Wellhoner, H. Novel isoform of pardaxin: structure and biological action: intracellular translocation of its non-hemolytic acyl derivative. Med Microbiol Immunol 189: 28, 2000.
 149. **Lazarovici, P.** Pardaxins, neuropharmacological tools for studying neurotransmitter release. 7th Symp. Pan-American Section of the Int. Soc. on Toxinology, Charlottesville, Virginia, 2001.
 150. Bloch-Shilderman, E., Jiang, H. and **Lazarovici, P.** MAPK is involved in PX-induced DA release from PC12 cells. 7th Symp. Pan-American Section of the Int. Soc. on Toxinology, Charlottesville, Virginia, 2001.
 151. Bloch-Shilderman, E., Jiang, H., Abu-Raya, S. and **Lazarovici, P.** MAPK is involved in pardaxin-induced dopamine release from PC12 cells. ISBMB Annual Meeting, Jerusalem, 2001.
 152. Weinstock, M., Kirschbaum-Slager, N., Lazarovici, P., Bejar, C. and Youdim, B.H. Neuroprotective effects of novel cholinesterase inhibitors derived from rasagiline as a potential anti-alzheimer drugs. 5th International Conference on Neuroprotection Agents. Lake Tahoe, Nevada, USA, 2000.
 153. **Lazarovici, P.**, Moalem, G., Gdalyahu, A., Shani, J., Otten, U., Cohen, I.R. and Schwartz, M. Production of neurotrophins by activated T cells: implication for neuroprotective autoimmunity. 7th Int. Conference on NGF and related molecules, Modena, Italy, 2002.
 154. Katzir, I., Shani, J., Ninary, E., Dogonowski, A.M., Goshen, G., Sela, J. and **Lazarovici, P.** Comparison of four morphometric methods for evaluating NGF bioassay using PC12 cells overexpressing trkA receptors. 7th Int. Conference on NGF and related molecules, Modena, Italy, 2002.
 155. Abu-Raya, S., Tabakman, R., Blaugrund, E., Trembovler, V. and **Lazarovici, P.** Neuroprotective and neurotoxic effects of MAO-B inhibitors and derived metabolites under ischemia (OGD) in PC12 cells. The Pharmacologist, 44 (Supp 1), p. A103, 2002.
 156. Tabakman, R., **Lazarovici, P.** and Kohen, R. Neuroprotective effects of

- carnosine and homocarnosine on pheochromocytoma PC12 cells exposed to ischemia (OGD). **9th Int. Symposium on Pharmacology of Cerebral Ischemia**, Marburg, Germany, 2002.
157. Tabakman, R., Jiang, H., Levine, R.A., Kohen, R. and **Lazarovici, P.** Apoptotic characteristics of cell death and the neuroprotective effect of carnosine-related compounds on pheochromocytoma PC12 cells exposed to oxygen and glucose deprivation (OGD). **Annual Meeting of the Israel Society for Physiology and Pharmacology**, Ma'ale Hachamisha, Israel, 2003.
 158. Tabakman, R., Jiang, H., Schaefer, E., Levine, R.A. and **Lazarovici, P.** Nerve growth factor pretreatment attenuates oxygen-glucose-deprivation induced c-Jun NH2-terminal kinase 1 (JNK 1) and stress-activated kinases P-38 α and P-38 β activation and confers neuroprotection in the PC12 ischemic model. **Annual Meeting of the Israel Society for Physiology and Pharmacology**, Ma'ale Hachamisha, Israel, 2003.
 159. Lecht, S., Tabakman, R., Reich, R., Sterin-Cohen, M., Ringel, I., Gibson, D. and **Lazarovici, P.** Development of an in vitro blood-brain barrier model using PC12EN endothelial cells. **Annual Meeting of the Israel Society for Physiology and Pharmacology**, Ma'ale Hachamisha, Israel, 2003.
 160. Umansky-Safanova, S., Jiang, H., Galski, H., Blumenfeld, A., Oddoux, C., Axelrod, F. and **Lazarovici, P.** Characterization and function of trkA mutations in Israeli patients with congenital insensitivity to pain with anhidrosis (CIPA) peritheral neuropathy. **Annual Meeting of the Israel Society for Physiology and Pharmacology**, Ma'ale Hachamisha, Israel, 2003.
 161. Kisiel, D.G., Calvete, J.J., **Lazarovici, P.** and Marcinkiewicz, C. KTS-containing disintegrins inhibit angiogenesis by interaction with $\alpha 1\beta 1$ integrin. **Mol Biol Cell** **14**, 213a, abstract 1188, 2003.
 162. Lecht, S., Tabakman, R., Harriton-Gazall, E., Gilon, C., Sterin-Cohen, M., Ringel, I., Reich, R. and **Lazarovici P.** Development of an in vitro blood-brain barrier model using PC12EN endothelial cells. **Neural Plasticity** **10**, 179-245, 2003
 163. Arien-Zakay, H., Galski, H., Nagler, A. and **Lazarovici, P.** Isolation and characterization of neuronal stem cell progenitors from human umbilical cord blood (UCB) for putative use in cell therapy. **Neural Plasticity** **10**, 179-245, 2003
 164. Tabakman, R., Jiang, H., Levine, R.A., Kohen, R. and **Lazarovici, P.** Apoptotic characteristics of cell death and the neuroprotective effect of carnosine-related compounds on pheochromocytoma PC12 cells exposed to oxygen and glucose deprivation (OGD). **Neural Plasticity** **10**, 179-245, 2003.
 165. Tabakman, R., Jiang, H., Schaefer, E., Levine, R.A. and **Lazarovici, P.** Nerve growth factor pretreatment attenuates oxygen-glucose-deprivation induced c-Jun NH2-terminal kinase 1 (JNK 1) and stress-activated kinases P-38 α and P-38 β activation and confers neuroprotection in the PC12 ischemic model. **Neural Plasticity** **10**, 179-245, 2003.
 166. Umansky-Safanova, S., Jiang, H., Galski, H., Blumenfeld, A., Oddoux, C., Axelrod, F. and **Lazarovici, P.** Characterization and function of trkA mutations in Israeli patients with congenital insensitivity to pain with anhidrosis (CIPA) peritheral neuropathy. **Neural Plasticity** **10**, 179-245,

- 2003
167. Tabakman, R., Jiang, H., Levine, R.A. and **Lazarovici, P.** Neuroprotection by NGF in ischemia: a lesson from the PC12 in vitro OGD model. **7th International Conference on Neuroprotective Agents**, Asilomar Conference, Pacific Grove, California, November, 2004.
 168. Lelkes, P.I., Troop, E.M., Frank, J.F., Katzir, A. and **Lazarovici P.** Unique pattern of gene and protein profiling in endothelial cells cultures in RWV-bioreactors. **BMES Annual Fall Meeting**, Philadelphia, Pennsylvania, USA, 2004.
 169. Lelkes, P.I., Troop, E.M., Frank, J.F., Katzir, A. and **Lazarovici P.** Unique pattern of gene and protein profiling in endothelial cells cultures in RWV-bioreactors. **NASA Cell Science Conference**, Galvestone, Texas, USA, 2004
 170. Leiser, Y., Dafni, L., Rosenfeld, E., Shay, B., Fermon, E., Hazefilderman, A., Cohen, Y., Tabakman, R., Shai, E., Blumenfeld, A., **Lazarovici, P.** and Deutsch, D. Molecular characterization of the tuftelin gene in the mouse brain and in PC12 and neuroblastoma cell. **8th European Symposium on Calcium-Binding Proteins in Normal and Transformed Cells**, Cambridge, England, 2004; COST 2004, Hungary
 171. Arien-Zakay, H., Galski, H., Nagler, A. and **Lazarovici, P.** Neuronal stem cells progenitors from human umbilical cord blood: development of a pharmacological approach toward induction of neural differentiation. **Annual Meeting of the Israel Society for Physiology and Pharmacology**, Ma'ale Hachamisha, Israel, 2005.
 172. Arien-Zakay, H., Galski, H., Nagler, A., Tabakman, R., Shahar, I., and **Lazarovici, P.** NGF-dependent expression of trkA receptors in human cord blood neural like progenitors grown in vitro. **Annual Meeting of the Israel Society for Physiology and Pharmacology**, Ma'ale Hachamisha, Israel, 2005.
 173. Lecht., S., Marcinkiewicz, C., Lelkes, P.I., and **Lazarovici, P.** An in vitro BBB model using endothelial cells of different origins and glial cells. **Annual Meeting of the Israel Society for Physiology and Pharmacology**, Ma'ale Hachamisha, Israel, 2005.
 174. Lipman, T., Tabakman, R., and **Lazaovici, P.** Neuroprotective effects of 4-hydroxy tempo in the un vitro Parkinson's model of NGF-differentiated PC12 cells exposed to MPP toxin. **Annual Meeting of the Israel Society for Physiology and Pharmacology**, Ma'ale Hachamisha, Israel, 2005.
 175. Arien-Zakay, H., Nagler, A., Tabakman, R., Shahar, I., Galski, H., and **Lazarovici, P.** Neuronal stem cell progenitors from human umbilical cord blood: induction of neuronal-like differentiation supports a role of NGF. **Reviews in the Neurosciences** 16: S3. Eilat, Israel, 2005.
 176. Lipman, T., Tabakman, R., and **Lazarovici, P.** Tempol, a free radical scavenger, decreased cell death induced by MPP+ toxin in NGF-differentiated PC12 cells. **Reviews in the Neurosciences** 16: S41. Eilat, Israel, 2005.
 177. Leiser, Y., Dafni, L., Taylor, AL., Rosenfeld, E., Shay, B., Fermon, E., Haze-Filderman, A., Cohen, Y., Tabakman, R., Blumenfeld, A., **Lazarovici, P.** and Deutsch, D. Induction of the tuftelin gene in the mouse brain and in PC12 cell line during hypoxia. **International Conference on Calcium Binding Proteins in Health and Disease**. Banff, Canada, 2005.

178. Leiser, Y., Dafni, L., Taylor, AL., Rosenfeld, E., Shay, B., Fermon, E., Haze-Filderman, A., Cohen, Y., Tabakman, R., Blumenfeld, A., **Lazarovici, P.** and Deutsch, D. Hypoxia induces the tuftelin gene (rain and PC12) via HIF1. **International Association for Dental Research Israeli Division**, Tel-Aviv, Israel, 2005.
179. Arien-Zakay, H., Tabakman, R., Shahar, I., Galski, H., **Lazarovici, P.**, and Nagler, A. The role of NGF for induction of neuronal stem cell differentiation from human umbilical cord blood. **Bone Marrow Transplantation** 37: S58. Hamburg, Germany 2006.
180. Lecht, S., Puxeddu, I., Levi-Schaffer, F., Marcinkiewicz, C., Lelkes, P.I., **Lazarovici, P.** Angiogenic effects of NGF in endothelial cells. **Annual meeting of the Israel Society for Biochemistry and Molecular Biology**, Rehovot, Israel, 2006.
181. Davidson, B., Reich, R., and **Lazarovici, P.** trkA-NGF receptor expression and activation in ovarian and breast carcinoma, and lung mesothelioma as a prognostic clinical biomarker. **NGF 2006**. Lyon, France, 2006.
182. Lecht, S., Puxeddu, I., Levi-Schaffer, F., Marcinkiewicz, C., Lelkes, P.I., **Lazarovici, P.** NGF stimulates angiogenesis in endothelial cells. **NGF 2006**. Lyon, France, 2006.
183. **Lazarovici, P.**, Lecht, S., Reich, R., Davidson, B., Marcinkiewicz, C. and Lelkes, P.I. –Nerve Growth Factor a neurotrophin with angiogenic activity. **8th International Conference in Angiogenesis: Basic Science and Clinical Applications**. Corfu, Greece, 2006; Endothelium 13: 297.
184. Perets, A., **Lazarovici, P.**, Li, M., Troop, E., Rezvan, A and Lelkes, P.I. Proteomic analysis of protein phosphorylation and signaling in PC12 exposed to modeled microgravity. **Drexel University Research Day**. Philadelphia, USA 2006.
185. Perets, A., **Lazarovici, P.**, Roszell, B., Li, M., and Lelkes, P.I. 3D collagen fibrous scaffold for neuron formation guiding survival and regeneration. **Drexel University Research Day**. Philadelphia, USA 2006.
186. Nagler, A., Arien-Zakay, H., Galski, H., Tabakman, R., Shahar, I and **Lazarovici, P.** Neuronal stem cell differentiation from human umbilical cord blood (HUCB): the role of nerve growth factor. **Cytotherapy**, 8:155, Suppl 1, 2006.
187. Lecht, S., Reich, R., Davidson, B., Marcinkiewicz, C., Lelkes, P.I. and **Lazarovici, P.** Nerve growth factor and its receptor (trk-A): novel targets for anti-angiogenic therapy. **2nd joint American-Israeli Conference on Cancer**, Jerusalem, Israel, 2006.
188. Lelkes, P.I., Troop, E.M., Gipson, G.T., Perets, A. and **Lazarovici, P.** Differential gene expression in mammalian cells cultured in rotating wall vessel bioreactor and exposed to low levels of laminar shear stress. **NASA Cell Science conference**, Galvestone, Texas, USA, 2006.
189. Arien-Zakay, H., Galski, H., Lazarovici, P. and Nagler, A. Neuronal differentiation of progenitors from human umbilical cord blood. **Experimental Hematology** 34: 80-81, Israel, 2006.
190. Arien-Zakay, H., Nagler, A., Galski, H. and **Lazarovici, P.** Neuronal conditioning medium and nerve growth factor induce neuronal differentiation of collagen-adherent progenitors derived from human umbilical cord blood. **15th Annual meeting of the Israeli Society for Neuroscience**, Eilat, Israel, 2006; Neural Plasticity 2007: 5.

191. Lecht, S., Fink, D.W. and **Lazarovici P.** Evidence for nerve growth factor and glucocorticoid receptor cross-talk in PC12 cells. **15th Annual meeting of the Israeli Society for Neuroscience**, Eilat, Israel, 2006; *Neural Plasticity* 2007: 57.
192. Higgins, M., Staniszewska, I., Oliva, I., Calvete, J., **Lazarovici, P.** and Marcinkiewicz, C. VEGF-related protein isolated from Vipera Palestinae venom, promotes angiogenesis. **46th Annual Meeting of The American Society for Cell Biology**, San Diego, USA, 2006.
193. Staniszewska, I., Higgins, M., **Lazarovici, P.** and Marcinkiewicz, C. NGF as a ligand for alpha9beta1 integrin induces progression of glioblastoma. **46th Annual Meeting of The American Society for Cell Biology**, San Diego, USA, 2006.
194. Arien-Zakay, H., Nagler, A., Galski, H. and **Lazarovici, P.** Neuronal differentiation of collagen-adherent progenitors derived from human umbilical cord blood. **Keystone Symposia proceeding**, Keystone, Colorado, USA, 2007.
195. Arien-Zakay, H., Nagler, A., Galski, H. and **Lazarovici, P.** Neuronal progenitors derived from human umbilical cord blood. **Stem Cells World congress**, La Jolla, CA, USA, 2007.
196. Arien-Zakay, H., Nagler, A., Galski, H. and **Lazarovici, P.** Neuronal conditioning medium and nerve growth factor induce neuronal differentiation of collagen-adherent progenitors derived from human umbilical cord blood. **EMBO/FEBS/ISF workshop on system dynamics of intracellular communication**, Maale Hamisha, Israel, 2007.
197. Lecht, S., Fink, D.W. and **Lazarovici P.** Nerve growth factor and glucocorticoid receptor cross-talk in PC12 cells. **EMBO/FEBS/ISF workshop on system dynamics of intracellular communication**, Maale Hamisha, Israel, 2007.
198. Tabakman, R., Shahar, I., Jiang, H., Arien-Zakay, H., Levine, R.A., Schaefer, E. and **Lazarovici, P.** The neuroprotective effect of NGF in the OGD PC12 model: differential inhibition of MAPK and modulation of gene expression. **EMBO/FEBS/ISF workshop on system dynamics of intracellular communication**, Maale Hamisha, Israel, 2007.
199. Lecht, S., Krilovetsky, I., Foerster, C., Lelkes, P.I., and **Lazarovici, P.** Differential expression of neuroangiogenic factors in brain compared to heart blood vessels: heterogeneity of endothelial cells. **4th Triennial Seminar on Neurodegenerative diseases: From the bench to the clinic**, Maale Hachamisha, Israel, 2007.
200. Lecht, S., Fink, D.W. and **Lazarovici, P.** RU-38486 (Mifepristone) blocks dexamethasone induced down regulation of p75 nerve growth factor receptor – implication for Alzheimer's-disease. **4th Triennial Seminar on Neurodegenerative diseases: From the bench to the clinic**, Maale Hachamisha, Israel, 2007.
201. Tabakman, R., Shahar, I., Jiang, H., Arien-Zakay, H., Levine, R.A., Schaefer, E. and **Lazarovici, P.** The neuroprotective effect of NGF in the oxygen and glucose deprivation PC12 model: Differential inhibition of mitogen-activated protein kinases and modulation of gene expression. **4th Triennial Seminar on Neurodegenerative diseases: From the bench to the clinic**, Maale Hachamisha, Israel, 2007.
202. Arien-Zakay, H., Nagler, A., Galski, H. and **Lazarovici, P.** Neuronal

- progenitors derived from human umbilical cord blood. **4th Triennial Seminar on Neurodegenerative diseases: From the bench to the clinic**, Maale Hachamisha, Israel, 2007.
203. Lipman, T., Tabakman, R. and **Lazarovici, P.** Neuroprotective effects of the stable nitroxide compound Tempol on 1-methyl-4-phenylpyridinium ion-induced neurotoxicity in the Nerve Growth Factor-differentiated Parkinson's model of pheochromocytoma PC12 cells. **4th Triennial Seminar on Neurodegenerative diseases: From the bench to the clinic**, Maale Hachamisha, Israel, 2007.
204. Tabakman, R., Ettinger, K., Dadush, O., Elbaz, M., Mitrani-Rosenbaum, S., **Lazarovici, P.** and Nevo, Y. Correlation between muscle strength, histological changes, collagen content and mouse mobility in the DY2J mouse model for merosin-deficient congenital muscular dystrophy. **4th Triennial Seminar on Neurodegenerative diseases: From the bench to the clinic**, Maale Hachamisha, Israel, 2007.
205. Arien-Zakay, H., Perets, A., Bercu, M., Lelkes, P.I., Or, R., Elchalal, U. and **Lazarovici, P.** Three-dimensional (3D) collagen fibrous scaffolds for neural engineering of human umbilical cord blood (HUCB-derived progenitors). **4th Triennial Seminar on Neurodegenerative diseases: From the bench to the clinic**, Maale Hachamisha, Israel, 2007.
206. Lecht, S., Foerster, C., Krilovetsky, I., Lelkes, P.I., and **Lazarovici, P.** Differential expression of bFGF in brain compared to heart microcapillary endothelial cells. **8th World congress for Microcirculation**, Milwaukee, WI, USA, 2007.
207. **Lazarovici, P.** Intelligent biomatrices for neural engineering. **6th Annual Meeting of The Israeli Chapter of the Controlled Release Society (ICRS)**, Caesarea, Israel, 2007.
208. Elchalal, U., Bercu, M., Arien-Zakay, H., Perets, A., Lelkes, P.I., Ezra, Y., Or, R., and **Lazarovici, P.** Three-dimensional (3D) collagen fibrous scaffolds for neural engineering of human umbilical cord blood (HUCB-derived progenitors). **SGI 2008 Annual Scientific Meeting**, San Diego, CA USA 2008.
209. Lecht, S., Wagenstien, Y., and **Lazarovici, P.** The complexity of Nerve growth factor signaling. **Katzir Workshop on The Unbearable Complexity of Life**, Tel Aviv, Israel, 2008.
210. Lecht, S., Cohen, G., Foerster, C., Lelkes., P.I., and **Lazarovici, P.** Heart endothelium is producing and affected by Nerve growth factor – relation to reparative angiogenesis. **The XXIV Annual Meeting of the Israeli Group for Heart research**, Jerusalem, Israel, 2008.
211. Brown, M.C., Calvete, J.J., Staniszewska, I., Walsh, E.M., Perez-Liz, G., Del Valle, L., **Lazarovici, P.**, and Marcinkiewicz, C. VEGF-related protein isolated from *Vipera palestinae* venom, promotes angiogenesis. **Angiogenesis: Basic Science and Clinical Applications**. Patras, Greece, 2008.
212. Lecht, S., Marcinkiewicz, C., Lelkes, P.I. and **Lazarovici, P.** NGF-induced angiogenic effects in endothelial cells involves transient activation of TRKA signaling pathways. **Angiogenesis: Basic Science and Clinical Applications**. Patras, Greece, 2008.
213. Walsh, E.M., Brown, M.C., **Lazarovici, P.**, and Marcinkiewicz, C. NGF as a ligand for $\alpha 9\beta 1$ integrin promotes glioblastoma cell survival, proliferation

- and migration. **Katzir Conference On Life And Death In The Nerveous System (NGF 2008)**. Kfar Blum, Upper Galilee, Israel, 2008.
214. Staniszewska, I., Sariyer, IK., Lecht, S., Brown, M.C., Walsh, E.M., Tuszyński, GP., Safak, M., **Lazarovici, P.**, and Marcinkiewicz, C. The integrin $\alpha 9\beta 1$ is a receptor for Nerve growth factor and other neurotrophins. **Katzir Conference On Life And Death In The Nerveous System (NGF 2008)**. Kfar Blum, Upper Galilee, Israel, 2008.
215. Arien-Zakay, H., Nagler, A., Galski, H. and **Lazarovici, P.** Neuronal conditioning medium and Nerve growth factor induce neuronal differentiation of progenitors derived from human umbilical cord blood (HUCB). **Katzir Conference On Life And Death In The Nerveous System (NGF 2008)**. Kfar Blum, Upper Galilee, Israel, 2008.
216. Arien-Zakay, H., Lecht, S., Bercu, MM., Tabakman, R., Kohen, R., Galski, H., Nagler, A. and **Lazarovici P.** Neuroprotection by human umbilical cord blood neuronal progenitors (HUCBNP's) in an *in vitro* ischemic model involving soluble antioxidant(s) and Nerve growth factor. **Katzir Conference On Life And Death In The Nerveous System (NGF 2008)**. Kfar Blum, Upper Galilee, Israel, 2008.
217. Tabakman, R., Shahar, I., Jiang, H., Arien-Zakay, H., Levine, R.A., Schaefer, E. and **Lazarovici. P.** The neuroprotective effect of NGF in the oxygen and glucose deprivation PC12 model: differential inhibition of Mitogen activated protein kinases and modulation of gene expression. **Katzir Conference On Life And Death In The Nerveous System (NGF 2008)**. Kfar Blum, Upper Galilee, Israel, 2008.
218. Lecht, S., Wagenstien, Y., Arien-Zakay, H., Marcinkiewicz, C., Lelkes, PI. and **Lazarovici, P.** NGF induced angiogenic effects in brain capillary endothelial cells in relation to transient activation of TRKA signaling pathways. **Katzir Conference On Life And Death In The Nerveous System (NGF 2008)**. Kfar Blum, Upper Galilee, Israel, 2008.
219. Arien-Zakay, H., Nagler, A., Galski, H. and **Lazarovici, P.** Neuronal differentiation of collagen-adherent progenitors derived from human umbilical cord blood. **Katzir Conference On Life And Death In The Nerveous System (NGF 2008)**. Kfar Blum, Upper Galilee, Israel, 2008.
220. Lecht, S., Wagenstien, Y., Marcinkiewicz, C., Lelkes, PI. and **Lazarovici, P.** Angiogenic and protective effect of nerve growth factor (NGF) in brain capillary endothelial cells involves transient activation of ERK1/2 signaling pathway. **Israel Society For Physiology and Pharmacology (ISPP)**. Ma'ale Hachamisha, Israel, 2008.
221. Lecht, S., Cohen, G., Marcinkiewicz, C. and **Lazarovici, P.** Identification and pharmacological characterization of novel nerve growth factor isoform from *Echis carinatus sochureki* snake venom. **Israel Society For Physiology and Pharmacology (ISPP)**. Ma'ale Hachamisha, Israel, 2008.
222. Arien-Zakay, H., Lecht, S., Bercu, MM., Tabakman, R., Kohen, R., Galski, H., Nagler, A. and **Lazarovici P.** Human umbilical cord blood collagen-adherent, nestin positive progenitors with neurogenic potential induce neuroprotection in an *in vitro* ischemic model involving soluble antioxidant(s) and angioneurins. **Israel Society For Physiology and Pharmacology (ISPP)**. Ma'ale Hachamisha, Israel, 2008.
223. Arien-Zakay, H., Lecht, S., Perets, A., Roszell, B., Lelkes, PI. and **Lazarovici, P.** Quantitative assessment of neuronal differentiation in three-

- dimensional collagen gels using enhanced green fluorescence protein expressing PC12 pheochromocytoma cells. **Israel Society For Physiology and Pharmacology (ISPP)**. Ma'ale Hachamisha, Israel, 2008.
224. Brown, M.C., Calvete, J.J., Staniszewska, I., Walsh, E.M., Perez-Liz, G., Del Valle, L., **Lazarovici, P.**, and Marcinkiewicz, C. VEGF-related protein isolated from *Vipera palestinae* venom, promotes angiogenesis. **Israel Society For Physiology and Pharmacology (ISPP)**. Ma'ale Hachamisha, Israel, 2008.
225. Arien-Zakay, H., **Lazarovici P.**, Galski, H. and Nagler, A. Isolation, differentiation and neuroprotective properties of neuronal progenitors from human umbilical cord blood. **Sheba Medical Center Research Day**. Tel Hashomer, Israel, 2009.
226. Leiser, Y., Abu-El-Naaj, I., Ben-Izhak, O., Deutsch, D., **Lazarovici P.**, Vlodavski, I., and Peled, M. The expression and possible prognostic role of heparanase in invasive squamous cell carcinoma versus locally aggressive non metastasizing verrucous carcinoma of the oral and maxillofacial region. **Oral Oncology: Imagine The Future. Second World Congress of the International Academy of Oral Oncology**. Toronto, Canada, 2009.
227. **Lazarovici P.**, Brown, M.C., Staniszewska, I., Tuszynski, P.G., Del Valle, L. and Marcinkiewicz, C. Regulation effect of nerve growth factor in alpha9beta1 integrin-dependent progression of glioblastoma. **Inaugurating Meeting of the Israeli Society of Cancer Research**. Tel Aviv, Israel, 2009.
228. Lecht, S., Riech, R., Davidson, B., Marcinkiewicz, C., Lelkes, PI. And **Lazarovici P.** Nerve growth factor: novel angiogenic growth factor. **Inaugurating Meeting of the Israeli Society of Cancer Research**. Tel Aviv, Israel, 2009.
229. Lecht, S., Marcinkiewicz, C., Lelkes, PI. And **Lazarovici P.** Nerve growth factor angiogenic effects involve TRKA receptor activation of ERK, PI3K/AKT and PLCgamma signaling. **New horizons in Cellular and Molecular Biology of the 21st Century - 50th Anniversary Annual Meeting of The Israeli Society for Biochemistry and Molecular Biology (ISBMB)**. Bar Ilan University, Israel, 2009.
230. Arien-Zakay, H., Lecht, S., Bercu, MM. Tabakman, R., Kohen, R., Galski, H., Nagler, A., **Lazarovici, P.** Neuroprotection by cord blood neural progenitors involves antioxidants, neurotrophic and angiogenic factors. **New horizons in Cellular and Molecular Biology of the 21st Century - 50th Anniversary Annual Meeting of The Israeli Society for Biochemistry and Molecular Biology (ISBMB)**. Bar Ilan University, Israel, 2009.
231. Arien-Zakay, H., Lecht, S., Galski, H., **Lazarovici, P.**, and Nagler, A. Human umbilical cord blood collagen-adherent, nestin positive neurological progenitors mediate neuroprotection in an oxidative stress-induced ischemic model. **European Group for Blood and Marrow Transplantation – 35th Annual Meeting**. Goteborg, Sweden, 2009.
232. **Lazarovici, P.** NGF angiogenic activity: receptors signaling and implications in cancer and tissue engineering. **NGF Meeting**. Institute of Neurobiology and Molecular Medicine, Center of National Research, Roma, Italy, 2009.
233. Stoler, D., Lecht, S., Arien-Zakay, H and **Lazarovici, P.** Development and characterization of a human in vitro photo-optic pharmacological model of epidermal growth factor receptor-over expressing colorectal cancer cells.

- Bio Medical Photonics Consortium Meeting**, Technion, Haifa, Israel, 2009.
234. **Lazarovici, P.** Snake venom angioneurins: toxic or therapeutic growth factors? **12th Biennial Meeting of the International Neurotoxicology Association**. Ma'ale Hachamisha, Israel, 2009.