ELAINE BEARER
PUBLICATIONS LIST

PEER-REVIEWED PUBLICATIONS:
Peer reviewed full length articles in scientific journals (listed by project)

Project 1: Mechanisms of axonal transport

Bearer, EL Role of transport in learning and memory (Invertebrate Models of Memory Mechanisms, Virtual Symposium, Biological Bulletin, (2006) accepted for publication.

Tyszka JM, Readhead C, Bearer EL, Pautler RG, Jacobs RE. Statistical diffusion tensor histology reveals regional dysmyelination effects in the shiverer mouse mutant. Neuroimage. 2005 Oct 3; [Epub ahead of print]

Bearer EL. Perspectives on herpes-APP interactions. Aging Cell. 2004 Apr;3(2):81-4.

Satpute-Krishnan P, DeGiorgis JA, Bearer EL. Fast anterograde transport of herpes simplex virus: role for the amyloid precursor protein of alzheimer's disease. Aging Cell. 2003 Dec;2(6):305-18.

Bearer EL, Satpute-Krishnan P. The role of the cytoskeleton in the life cycle of viruses and intracellular bacteria: tracks, motors, and polymerization machines. Curr Drug Targets Infect Disord. 2002 Sep;2(3):247-64.

DeGiorgis JA, Reese TS, Bearer EL. Association of a nonmuscle myosin II with axoplasmic organelles. Mol Biol Cell. 2002 Mar;13(3):1046-57.

Bearer EL, Breakefield XO, Schuback D, Reese TS, LaVail JH. Retrograde axonal transport of herpes simplex virus: evidence for a single mechanism and a role for tegument. Proc Natl Acad Sci U S A. 2000 Jul 5;97(14):8146-50.

Bearer EL, Reese TS. Association of actin filaments with axonal microtubule tracts. J Neurocytol. 1999 Feb;28(2):85-98.

Bearer EL, Schlief ML, Breakefield XO, Schuback DE, Reese TS, LaVail JH. Squid axoplasm supports the retrograde axonal transport of herpes simplex virus. Biol Bull. 1999 Oct;197(2):257-8.

Medeiros NA, Reese TS, Jaffe H, Degiorgis JA, Bearer EL. Primary peptide sequences from squid muscle and optic lobe myosin IIs: a strategy to identify an organelle myosin. Cell Biol Int. 1998;22(2):161-73.

Bearer EL, DeGiorgis JA, Jaffe H, Medeiros NA, Reese TS. An axoplasmic myosin with a calmodulin-like light chain. Proc Natl Acad Sci U S A. 1996 Jun 11;93(12):6064-8.

Bearer EL, DeGiorgis JA, Medeiros NA, Reese TS.Actin -based motility of isolated axoplasmic organelles. Cell Motil Cytoskeleton. 1996;33(2):106-14.

Bearer EL, DeGiorgis JA, Bodner RA, Kao AW, Reese TS.Evidence for myosin motors on organelles in squid axoplasm. Proc Natl Acad Sci U S A. 1993 Dec 1;90(23):11252-6.

Project 2: Actin dynamics and platelet coagulation:

Li Z, Kim ES, Bearer EL. Arp2/3 complex is required for actin polymerization during platelet shape change. Blood. 2002 Jun 15;99(12):4466-74.

Bearer EL, Prakash JM, Li Z. Actin dynamics in platelets. Int Rev Cytol. 2002;217:137-82. Review.

Abraham MT, Kuriakose MA, Sacks PG, Yee H, Chiriboga L, Bearer EL, Delacure MD. Motility-related proteins as markers for head and neck squamous cell cancer. Laryngoscope. 2001 Jul;111(7):1285-9.

Bearer EL, Chen AF, Chen AH, Li Z, Mark HF, Smith RJ, Jackson CL. 2E4/Kaptin (KPTN)--a candidate gene for the hearing loss locus, DFNA4. Ann Hum Genet. 2000 May;64(Pt 3):189-96.

Bearer EL, Prakash JM, Manchester RD, Allen PG. VASP protects actin filaments from gelsolin: an in vitro study with implications for platelet actin reorganizations. Cell Motil Cytoskeleton. 2000 Dec;47(4):351-64.

Bearer EL, Abraham MT. 2E4 (kaptin): a novel actin-associated protein from human blood platelets found in lamellipodia and the tips of the stereocilia of the inner ear. Eur J Cell Biol. 1999 Feb;78(2):117-26.

Cheng JC, Frackelton AR Jr, Bearer EL, Kumar PS, Kannan B, Santos-Moore A, Rifai A, Settleman J, Clark JW. Changes in tyrosine-phosphorylated p190 and its association with p120 type I and p100 type II rasGAPs during myelomonocytic differentiation of human leukemic cells. Cell Growth Differ. 1995 Feb;6(2):139-48.

Bearer EL. Cytoskeletal domains in the activated platelet. Cell Motil Cytoskeleton. 1995;30(1):50-66.

Bearer EL. Distribution of Xrel in the early Xenopus embryo: a cytoplasmic and nuclear gradient. Eur J Cell Biol. 1994 Apr;63(2):255-68.

Bearer EL. Role of actin polymerization in cell locomotion: molecules and models. Am J Respir Cell Mol Biol. 1993 Jun;8(6):582-91. Review.

Bearer, E.L. Actin and actin-associated proteins in Xenopus eggs and early embryos: contribution to cytoarchitecture and gastrulation. Curr Top Dev Biol. 1992; 26:35-52.

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Bearer EL.An actin-associated protein present in the microtubule organizing center and the growth cones of PC-12 cells. J Neurosci. 1992 Mar;12(3):750-61.

Bearer EL. Actin and actin-associated proteins in Xenopus eggs and early embryos: contribution to cytoarchitecture and gastrulation. Curr Top Dev Biol. 1992;26:35-52.

Bearer EL. Direct observation of actin filament severing by gelsolin and binding by gCap39 and CapZ. J Cell Biol. 1991 Dec;115(6):1629-38.

Bearer EL.Actin in the Drosophila embryo: is there a relationship to developmental cue localization? BioEssays. 1991 Apr;13(4):199-204. Critical Review.

Project 3: Membrane topography and lipid microdomains

Bearer EL, Friend DS. Morphology of mammalian sperm membranes during differentiation, maturation, and capacitation. J Electron Microsc Tech. 1990 Dec;16(4):281-97. Review.

Bearer EL. Platelet membrane skeleton revealed by quick-freeze deep-etch. Anat Rec. 1990 May;227(1):1-11.

Bearer EL, Friend DS. Lipids of the platelet membrane. Lab Invest. 1986 Feb;54(2):119-21.

Orci L. and Bearer, EL Rose windows in blood capillaries. Diabetes Forecast (February) pp31-33.

Bearer EL, Orci L. Endothelial fenestral diaphragms: a quick-freeze, deep-etch study. J Cell Biol. 1985 Feb;100(2):418-28.

Bearer EL, Duzgunes N, Friend DS, Papahadjopoulos D. Fusion of phospholipid vesicles arrested by quick-freezing. The question of lipidic particles as intermediates in membrane fusion. Biochim Biophys Acta. 1982 Dec 8;693(1):93-8.

Bearer EL, Friend DS. Modifications of anionic-lipid domains preceding membrane fusion in guinea pig sperm. J Cell Biol. 1982 Mar;92(3):604-15.

Friend DS, Bearer EL. Beta-Hydroxysterol distribution as determined by freeze-fracture cytochemistry. Histochem J. 1981 Jul;13(4):535-46.

Bearer EL, Friend DS.Anionic lipid domains: correlation with functional topography in a mammalian cell membrane. Proc Natl Acad Sci U S A. 1980 Nov;77(11):6601-5.

Technical and methods papers

Bearer, E.L. Overview of Image Analysis, Image Importing, and Image Processing Using Freeware. Current Protocols in Molecular Biology 2003; Unit 14.15

Bearer, E. L. Obtaining peptide sequences of myosins for PCR primer design. Methods in Molecular Biology: Cytoskeleton, Methods and Protocols, ed: R. Gavin, Humana Press, Totowa, N.J. Vol 16: pp 9-15.

Bearer, E.L., Liu, J., Hsu, A. and Reese, T.S. (1996). A method to visualize axoplasmic filaments by electronmicroscopy. Biol. Bull. 1996; 191:272-273.

Bearer EL Orci L. A simple method for quick freezing. J. Electron Microsc. Tech. 1986 3:119-121.

Bearer, E.L. Fluorescence microscopy of single actin filaments labeled by conjugation to rhodamine. Biol. Bull. 1992; 183: 361 - 362P