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## BIOGRAPHICAL SKETCH

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NAME		POSITION TITLE	
Douglas B. Murphy, Ph.D.		Professor	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Rochester, Rochester, NY	A.B.	1967	Biology
Syracuse University, Syracuse, NY	M.S.	1969	Zoology
University of Pennsylvania, Philadelphia, PA	Ph.D.	1973	Biology
University of Wisconsin, Madison, WI	Postdoc	1973-1976	Molecular Biology

### A. Positions and Honors

1976-1978	Assistant Professor, Division of Biology, Kansas State University, Manhattan, KS
1978-1984	Assistant Professor, Dept. of Cell Biology and Anatomy, Johns Hopkins Medical School, Baltimore, MD
1984-1988	Associate Professor, Dept. of Cell Biology and Anatomy, Johns Hopkins Medical School, Baltimore, MD
1988-present	Professor, Dept. of Cell Biology and Anatomy, Johns Hopkins Medical School, Baltimore, MD

### Awards and Professional Activities:

1977	Steps Towards Independence Award, Marine Biological Lab, Woods Hole, MA
1980-1985	Research Career Development Award, NIH
1984, 1987	National Academy of Sciences Exchange Scientist to the USSR
1985	Fulbright Senior Scholar to the USSR; Cell Biology Lectureship at Moscow State University
1987-1990	Monitoring Editor, The Journal of Cell Biology
1988-1992	NIH Cell Biology Study Section

### B. Research publications (partial listing)

Murphy, D.B., 2001. *Fundamentals of Light Microscopy and Electronic Imaging*, John Wiley & Sons, NY.

Kaiser, D.A., Vinson, V., Murphy, D.B., and T.D. Pollard, 1999. Profilin is predominantly associated with monomeric actin in *Acanthamoeba*. *J Cell Sci.* 112, 3779-90.

Parent, C.A., Blacklock, B.J., Froehlich, W.M., Murphy, D.B., and Devreotes, P.N., 1998. G Protein Signaling Events are Activated at the Leading Edge of Chemotactic Cells. *Cell* 95, 81-91.

Xiao, Z., Zhang, N., Murphy, D.B., and Devreotes, P.N., 1997. Dynamic Distribution of Chemoattractant Receptors in Living Cells During chemotaxis and Persistent Stimulation. *J. Cell Biol.*, 139, 365-374.

Turner, D.C., Chang, C., Brandow, S.L., Murphy, D.B. and Gaber, B.P. 1995. Use of a repositionable substrate to acquire and compare distinct atomic force images of field of microtubules. *Ultramicroscopy* 58:425-434.

- Turner, D.C., Chang, C., Fang, K., Brandow, S. and Murphy, D.B. 1995. Selective adhesion of functional microtubules on patterned silane surfaces. *Biophys. J.* 69:2782-2789.
- Baumann, O. and Murphy, D.B. 1995. Microtubule-associated movement of mitochondria. *Cell Motility and the Cytoskeleton* 32:305-317.
- Schmitz, F., Wallis, K.T., Rho, M. Drenckhahn, D. and Murphy, D.B. 1994. Kinesin binds tightly to organellar membranes in neurosecretory and tissue culture cells. *Eur. J. Cell Biol.* 63:77-83.
- Urrutia, R., Murphy, D.B., Kachar, B. and McNiven, M.A. 1994. Kinesin-mediated vesicular transport in a biochemically defined assay. *Meth. Cell Biol.* 39:179-190.
- Wallis, K.T., Azhar, S., Rho, M.B., Lewis, S.A., Cowan, N.J. and Murphy, D.B. 1993. The mechanism of equilibrium binding of MAP2 to microtubules: binding is a multi-phasic process and exhibits positive cooperativity. *J. Biol. Chem.* 268: 15158-15167.
- Trinczek, B., Marx, A., Mandelkow, E-M., Murphy, D.B. and Mandelkow, E. 1993. Dynamics of microtubules from erythrocyte marginal bands. *Mol. Biol. Cell* 4:323-335.
- Rothwell, S.W., Grasser, W.A., Baker, H.N. and Murphy, D.B. 1987. The relative contributions of polymer annealing and subunit exchange to microtubule dynamics in vitro. *J. Cell Biol.* 105:863-874.
- Murphy, D.B., Wallis, K.T., Machlin, P.S., Rattie, H. and Cleveland, D.W. 1987. The sequence and expression of the divergent chicken erythrocyte beta tubulin in chicken. *J. Biol. Chem.* 262: 14305-14312.
- Rothwell, S.W., Grasser, W.A. and Murphy, D.B. 1986. End-to-end annealing of microtubules in vitro. *J. Cell Biol.* 102:619-627.
- Murphy, D.B. and Wallis, K.T. 1985. Erythrocyte microtubule assembly in vitro: determination of the effects of erythrocyte tau, tubulin isoforms, and tubulin oligomers on erythrocyte tubulin assembly, and comparisons with brain microtubule assembly. *J. Biol. Chem.* 260: 12293-12301.
- Gottlieb, R.A. and Murphy, D.B. 1983. The pattern of MAP-2 binding on microtubules: visual enhancement of MAP attachment sites by antibody labeling and electron microscopy. *J. Ultrastruct. Res.* 85:175-185.
- Murphy, D.B., R.B. Vallee and G.G. Borisy. 1977. Identity and polymerization-stimulatory activity of the nontubulin proteins associated with microtubules. *Biochemistry* 16:2598-2605.
- Murphy, D.B. and G.G. Borisy. 1975. The association of high molecular weight proteins with microtubules and their role in microtubule assembly in vitro. *Proc. Natl. Acad. Sci. USA* 72:2696-2700.