

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed for Form Page 2.  
Follow the sample format on for each person. (See attached sample). **DO NOT EXCEED FOUR PAGES.**

NAME		POSITION TITLE	
Paul E. Micevych		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
College of St. Thomas – St. Paul, MN	B.A.	1976	Biology
University of Minnesota – Minneapolis, MN	Ph.D.	1980	Anatomy
Mayo Clinic – Rochester, MN	Postdoctoral	1982	Neurosurgery

**A. Positions and Honors.****Positions and Employment**

1976 – 1980	Teaching Assistant, Department of Anatomy, Univ. Minnesota, Minneapolis, MN
1980 – 1981	Sandoz Fellow (Postdoct Fellow, Dr. T. Yaksh), Dept. Neurologic Surgery, Mayo Clinic, Rochester, MN
1982 – 1983	Instructor, Dept. Anatomy, Mayo Medical School, Rochester, MN
1983 – 1988	Member of Brain Research Institute, Univ. California, Los Angeles
1988 – 1992	Associate Professor, Dept. of Neurobiology, Univ. California, Los Angeles
1992 – Present	Professor, Dept. of Neurobiology, Univ. California, Los Angeles
1994 – 1996	Interim Chair, Dept. of Neurobiology, Univ. California, Los Angeles
1997 – 1999	Member, NSF Scientific Reew Panel for the Neuroendocrinology
2000, 2003	Member, IFCN-2 Study Section, NIH

**Honors**

Delta Epsilon National Honor Society

**B. Selected from 140 peer-reviewed publications (in chronological order).**

1. Akesson TA, **Micevych PE**. Sex steroid regulation of tachykinin peptides in neuronal circuitry mediating reproductive function. In: **Micevych PE**, Hammer R (Eds.), *Neurobiology of Sex Steroid Hormones*. Cambridge University Press, 1995.
2. **Micevych PE**, Popper P, Hatton G. Alterations of connexin 32 mRNA levels during parturition and lactation. *Neuroendocrine* 1996;63:39-45.
3. Campagnoni CW, Garby B, **Micevych PE**, Priby T, Kampf K, Handley VW, Campagnoni AT. The DM20 mRNA splice product of the myelin proteolipid protein gene is expressed in the murine heart. *J Neurochem* 1992;33:148-155.
4. Priest CA, Eckersell C, **Micevych PE**. Estrogen regulates preproenkephalin-A mRNA levels in the rat ventromedial nucleus: temporal and cellular aspects. *Mol Brain Res* 1995;28:251-262.
5. Priest CA, Vink K, **Micevych PE**. Temporal sequence of estrogen regulation of  $\beta$ -preprotachykinin mRNA expression in the rat ventromedial nucleus of the hypothalamus. *Mol Brain Res* 1995;28:61-71.
6. Bronstein JM, Popper P, **Micevych PE**, Farber DB. Isolation and characterization of a novel oligodendrocyte-specific protein. *Neurology* 1996;47:772-778.
7. Clark JT, **Micevych PE**, Panossian V, Keaton AK. Testosterone-induced copulatory behavior is affected by the post-castration interval. *Neurosci Biobehav Rev* 1995;3:369-376.
8. **Micevych PE**, Eckersell C, Holland K, Smith A. Induction of CCK mRNA levels in the limbic-hypothalamic circuit: time course and site-specific effects of estrogen. *J Neurobiol* 1996;30:465-479.
9. Babcock AM, Liu H, Paden CM, Edmo D, Popper P, **Micevych PE**. Transient cerebral ischemia decreases calcium/calmodulin-dependent protein kinase II immunoreactivity, but not mRNA levels in the gerbil hippocampus. *Brain Res* 1996;705:307-314.
10. Simmons DD, Raji-Kubba J, Popper P, **Micevych PE**. Developmentally regulated expression of CGRP in the superior olive. *J Comp Neurol* 1997;377:207-216.
11. Eckersell CB, **Micevych PE**. Opiate receptors modulate estrogen-induced CCK and tachykinin but not enkephalin mRNA levels in the limbic system and hypothalamus. *Neuroscience* 1997;80:473-485.

12. Mathern GW, Babb TL, **Micevych PE**, Blanco CE, Pretorius JK. Granule cell expression of mRNAs for BDNF, NGF and NT-3 correlate with neuron losses of supragranular mossy fiber sprouting in the chronically damaged and epileptic human hippocampus. *Mol Chem Neuropathol* 1997;30:53-76.
13. Holland K, Popper P, **Micevych PE**. Antisense oligodeoxynucleotides to CCK<sub>A</sub> receptor mRNA inhibits lordosis behavior. *Physiol and Behav* 1997;62:537-543.
14. Blanco CP, Popper P, **Micevych PE**. Pharmacological doses of testosterone and up-regulate choline-acetyltransferase mRNA. *Neurosci* 1997;78:873-882.
15. Olive MF, Anton B, **Micevych PE**, Evans CJ, Maidment NT. Presynaptic versus postsynaptic localization of  $\mu$  and  $\delta$  opioid receptors in dorsal and ventral striatopallidal pathways. *J Neuroscience* 1997;17:7471-7479.
16. **Micevych PE**, Eckersell CB, Brecha N, Holland K. Estrogenic regulation of opioid-CCK interactions in the medial preoptic area. *Brain Res Bull* 1997;44:335-344.
17. Sinchak K, Hendricks D, Baroudi R, **Micevych PE**. Orphanin FQ/Nociception in the ventromedial nucleus facilitates lordosis. *NeuroReport* 1997;8:3857-3860.
18. Holland K, Abelson L, **Micevych PE**. Ontogeny and estrogen regulation of prepubertal CCK and preproenkephalin mRNA in the hypothalamus and limbic system. *J Comp Neurol* 1998;392:48-57.
19. Holland K, Smith A, Norell A, **Micevych PE**. Interactions of thyroxine and estrogen on the expression of estrogen receptor, cholecystokinin and preproenkephalin mRNA in the limbic-hypothalamic circuit. *Mol Endocrinol* 1998;130:1221-1228.
20. Eckersell C, Popper P, **Micevych PE**. Estrogen-induced alteration of  $\mu$ -opioid receptor immunoreactivity in the medial preoptic area and medial amygdala. *J Neuroscience* 1998;18:3967-3976.
21. **Micevych PE**, Popper P, Blanco EE. Anabolic-anabolic steroid regulation of ene expression in rat spinal motoneurons. In: Fahim (Ed.), *Symposia Gaussiana: Neuromuscular Plasticity During Development and Aging*, 1997, pp 143-157.
22. **Micevych PE**, Eckersell C, Brecha N, Holland K. Estrogen modulation of Opioid and cholecystokinin systems in the limbic-hypothalamic circuit. *Brain Res Bull* 1997;44:335-344.
23. Saldanha CJ, Popper P, **Micevych PE**, Schlinger B. The passerine hippocampus is a site of high aromatase: Inter- and intra-species comparisons. *Hormones Behav* 1998;34:85-97.
24. Sinchak K, Eckersell CE, Quezada V, Norell A, **Micevych PE**. Preproenkephalin mRNA levels are regulated by acute stress and estrogen stimulation. *Physiol Behav* 2000;69:425-432.
25. Tiwari-Woodruff SK, Buznikov AG, Trung Q, **Micevych PE**, Kornblum HI, Chen K, Bronstein JM. OSP/claudin-11 forms a complex with a novel member of the tetraspanin super family and b1 – integrin, and regulates proliferation and migration of oligodendrocytes. *J Cell Biol* 2001;153:295-305.
26. Sinchak K, **Micevych PE**. Progesterone blockade of estrogen activation of  $\mu$ -opioid receptors regulates reproductive behavior. *J Neuroscience* 2001;21:5723-5729.
27. **Micevych PE**, Sinchak K. Estrogen and endogenous opioid regulate CCK in reproductive circuits. *Peptides* 2001;22:1235-1244.
28. Mills RH, Romeo HE, Lu JK, **Micevych PE**. Site-specific decrease of progesterone receptor mRNA expression in the hypothalamus of middle-aged persistently estrus rats. *Brain Res* 2002;955:200-6.
29. Raji-Kubba J, **Micevych PE**, Simmons DD. The superior olivary complex of the hamster has multiple periods of cholinergic neuron development. *J Chem Neuroanat* 2002;24:75-93.
30. Cristobal R, Popper P, Lopez I, **Micevych P**, De Vellis J, Honrubia V. In vivo and in vitro localization of brain-derived neurotrophic factor, fibroblast growth factor-2 and their receptors in the bullfrog vestibular end organs. *Brain Res Mol Brain Res* 2002;102:83-99.
31. **Micevych PE**, Rissman E, Macias L, Sinchak K. Estrogen receptor is required for estrogen-induced  $\mu$ -opioid receptor internalization. *J Neurosci Res* 2003;71:802-10.
32. **Micevych P**, Chaban V, Quesada A, Sinchak K. Oestrogen modulates cholecystokinin: Opioid interactions in the nervous system. *Pharmacol Toxicol* 2002;91:387-97.
33. Chaban VV, Mayer EA, Ennes HS, **Micevych PE**. Estradiol inhibits ATP-induced intracellular calcium concentration increase in dorsal root ganglia neurons. *Neuroscience* 2003;118:941-8.
34. Sinchak K, **Micevych P**. Visualizing activation of opioid circuits by internalization of G-protein-coupled receptors. *Mol Neurobiol* 2003;27:197-222.

### C. Research Support

**Ongoing Research Support**

RO1 DA 13185 Micevych (PI)  
NIH/NIDA

03/01/01 – 02/28/06

Sex Steroid Activation of Opioid Circuits in the CNS

The major goals of this project are to define the actions of estrogen and progesterone on mu-opioid receptors and orphanin FQ receptor mediated circuits that regulate sexual receptivity.

Role: PI

RO1 NS 39495-01 Micevych (PI)  
NIH/NINDS

12/10/99 – 11/30/03

Neuropeptide-Steroid Interactions in the CNS

The major goal of this project is to determine how CCK and endogenous opioid systems interact in the limbic hypothalamic circuit and how estrogen regulates these interaction in regards to reproductive behavior.

Role: PI

PO1 HD 04612-24 DeVellis (PI)  
NIH/NICHD

08/01/2000 – 06/30/05

Mental Retardation Research Center – Neurocytology/Cell Imaging Core

The major goal of this project is to provide morphological and imaging support for NIH-funded investigators in the UCLA Mental Retardation Research Center.

Role: Core Coordinator

T32 HD 07228 Arnold (PI)  
NIH/NICHD

04/01/01 – 03/31/06

Neuroendocrinology of Reproduction

The major goal of this project is the training of graduate students and postdoctoral fellows in reproductive neuroendocrinology.

Role: Training Faculty Member

**Completed Research Support**

P01 DC 029501 Honrubia (PI)  
NIH/NICD

12/01/96 – 11/30/01

Otoneurologic and vestibular clinical and basic research

The major goal of this project is to examine the temporal aspects of the morphological and physiological recovery of the vestibular system following peripheral gentamicin lesion.

Role: Co-Investigator

IBN-9728491 Micevych, Sinchak (co-PI's)  
National Science Foundation

07/01/98 – 12/31/99

Steroid Regulation of Opioid Receptors

The major goals of this proposal are to characterize the distribution of orphanin FQ/nociceptin and  $\mu$ -opioid receptors in the hypothalamus during the estrous cycle.

Role: Co-PI

RO1 NS21220-10 Micevych (PI)  
NIH/NINDS

04/01/93 – 03/21/98

Sex Differences in CCK Release and Function

The major goal of this project was to determine sex differences and steroid regulation of CCK expression and release in the hypothalamus and limbic system. Within the context of this grant, the role of CCK was determined in modulation of male and female reproductive behavior.

Role: PI

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Principal Investigator/Program Director (Last, first, middle):