

# CURRICULUM VITAE

## Michael Wagner

Research Assistant Professor  
State University of New York Downstate Medical Center

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## Education

Bachelor of Science in Chemistry, Georgetown University, May 1976.

Non-degree post baccalaureate, Biology/Biochemistry, Columbia University, 1979

Doctorate of Genetics, University of Pennsylvania, 1984

## Research Experience

Research Assistant Professor, Department of Cell Biology, State University of New York Downstate Medical Center, September 1994 – present.

Postdoctoral Research Scientist to Associate Research Scientist, Center for Neurobiology and Behavior, Columbia University, 1991 – 1994

Postdoctoral Fellow, Howard Hughes Medical Institute, Columbia University, 1988 – 1991

Postdoctoral Fellow to Postdoctoral Research Associate, Laboratory of Molecular and Cellular Neuroscience, The Rockefeller University, 1984 – 1988

Graduate Student, University of Pennsylvania (Institute for Cancer Research, Fox Chase Cancer Center) 1979 – 1984

Research Technician, Department of Pathology, Columbia University, 1977 – 1979

Research Technician, National Cancer Institute, Frederick Cancer Research Center, 1976

## Teaching Experience:

Graduate-level lecture/discussion on developmental biology in Graduate School Molecular and Cellular Biology program

Medical school lectures (cardiovascular histology, stem cells and Regenerative Medicine)

Faculty facilitator in medical school Case-Based Learning curriculum

Organized and ran graduate student journal club

### Fellowships:

Muscular Dystrophy Association Postdoctoral Fellowship, 1985-1987

Howard Hughes Medical Institute postdoctoral fellow, 1988-1991

Columbia University Cancer Research postdoctoral training grant, 1991-1992

Columbia University, Center for Neurobiology and Behavior postdoctoral training grant, 1992-1994

### Publications:

1. **Wagner, M.** and Siddiqui, M.A.Q. Signaling networks regulating cardiac myocyte survival and death. *Curr. Opin. In Investigational Drugs.* 2009; 10(9):928-37.
2. Espinoza-Derout, J., **Wagner, M.**, Lazar, J., Saliccioli, S., Chaqour, B. and Siddiqui, M.A.Q. Positive Transcription Elongation Factor b Activity in Compensatory Myocardial Hypertrophy is Regulated by Cardiac Lineage Protein-1. *Circulation Res.* 2009; 104(12):1347-54.
3. Liao WL, Tsai HC, Wang HF, Chang J, Lu KM, Wu HL, Lee YC, Tsai TF, Takahashi H, **Wagner M**, Ghyselinck NB, Chambon P, Liu FC. Modular patterning of structure and function of the striatum by retinoid receptor signaling. *Proc Natl Acad Sci U S A.* 2008; 105(18):6765-70.
4. **Wagner M** and Siddiqui MAQ. Signal Transduction in Early Heart Development (I): Cardiogenic Induction and Heart Tube Formation. *Exp. Biol. Med.* 2007; 232(7):852-65.
5. **Wagner M** and Siddiqui MAQ. Signal Transduction in Early Heart Development (II): Ventricular Chamber Specification, Trabeculation and Heart Valve Formation. *Exp. Biol. Med.* 2007; 232(7):866-80.
6. Espinoza-Derout J, **Wagner M**, Shahmiri K, Mascareno E, Chaqour B, Siddiqui MAQ. Pivotal role of cardiac lineage protein-1 (CLP-1) in transcriptional elongation factor P-TEFb complex formation in cardiac hypertrophy. *Cardiovasc Res.* 2007; 75(1):129-38.
7. Liao WL, Wang HF, Tsai HC, Chambon P, **Wagner M**, Kakizuka A, Liu FC. Retinoid signaling competence and RARbeta-mediated gene regulation in the developing mammalian telencephalon. *Dev Dyn.* 2005; 232(4):887-900.
8. Huang, F., **Wagner, M.**, Siddiqui, M.A.Q. Ablation of the CLP-1 gene leads to down-regulation of the HAND1 gene and abnormality of the left ventricle of the heart and fetal death. *Mech. Dev.* 2004; 121:559-572.
9. Miles K, **Wagner M.** Overexpression of nPKC theta is inhibitory for agrin-induced nicotinic acetylcholine receptor clustering in C2C12 myotubes. *J Neurosci Res.* 2003; 71(2):188-95.
10. Huang F, **Wagner M**, Siddiqui M.A.Q. Structure, expression, and functional characterization of the mouse CLP-1 gene. *Gene* 2002; 292: 245-259.
11. **Wagner, M.**, Miles, K., and Siddiqui, M.A.Q. Early Developmental Expression Pattern of Retinoblastoma Tumor Suppressor mRNA Indicates a Role in the Epithelial-to-Mesenchyme Transformation of Endocardial Cushion Cells. *Dev. Dynamics* 2001; 220:198-211.
12. Miles, K. and **Wagner, M.** Overexpression of nPKC-theta is permissive for myogenic differentiation. *J. Cell. Biochem.* 2000; 79:71-79.
13. Chandrasekaran, V., Zhai, Y., **Wagner, M.**, Kaplan, P.L., Napoli, J.L., and Higgins, D. Retinoic Acid Regulates the Morphological Development of Sympathetic Neurons. *J. Neurobiol.* 2000; 42:383-393.
14. **Wagner MA.** Use of reporter cells to study endogenous retinoid sources in embryonic tissues. *Methods*

- Enzymol. 1997; 282:98-107.
15. Ang, H.L., Detour, L., Knight, M., **Wagner, M.**, and Duester, G.) Expression Patterns of Class I and Class IV Alcohol Dehydrogenase Genes in Developing Epithelia Suggest a Role for Alcohol Dehydrogenase in Local Retinoic Acid Synthesis. *Alcoholism. Clin. And Exp. Res.* 1996; 20:1050-1059.
  16. Kelley, M.W., X-M. Xu, **M. A. Wagner**, M.E. Warchol, and J.T. Corwin. The developing organ of Corti contains retinoic acid and forms supernumerary hair cells in response to exogenous retinoic acid in culture. *Development* 1993; 119:1041-1053.
  17. **Wagner, M.**, B. Han, and T.M. Jessell. Regional differences in retinoid release from embryonic neural tissue detected by an in vitro reporter assay. *Development* 1992; 116:55-66.
  18. McCaffery, P., M. Lee, **M. A. Wagner**, N. E. Sladek, and U. C. Drager. Asymmetrical retinoic acid synthesis in the dorsoventral axis of the retina. *Development* 1992; 115:371-382.
  19. **Wagner, M.**, C. Thaller, T. Jessell, and G. Eichele. Polarizing activity and retinoid synthesis in the floor plate of the neural tube. *Nature* 1990; 345: 819-822.
  20. Sudhof, T. C., A. J. Czernik, H-T. Kao, K. Takei, P.A. Johnston, A. Horiuchi, S. D. Kanazir, **M. A. Wagner**, M. S. Perin, P. De Camilli, and P. Greengard. The Synapsins: Mosaics of shared and unique domains in a family of synaptic vesicle phosphoproteins. *Science* 1989; 245:1474-1480.
  21. **Wagner, M.** A consideration of the origin of processed pseudogenes. *Trends in Genetics* 1986; 2:134-137.
  22. **Wagner, M.** and R.P. Perry. Characterization of the multigene family encoding the mouse S16 ribosomal protein: Strategy for distinguishing an expressed gene from its processed pseudogene counterparts by an analysis of total genomic DNA. *Mol. Cell. Biol.* 1985; 5:3560-3576.

#### Book Chapters

23. M.A.Q. Siddiqui, **Michael Wagner**, Jorge Espinoza-Derout, Facan Huang, Daniel Beckles, and Eduardo Mascareno (In press, 2011). CLP-1-Mediated Transcriptional Control of Hypertrophic Gene Programs Underlying Cardiac Hypertrophy. In *Genes and Cardiovascular Function*, Osterdal, B., Nagao, M. and Dhalla, N., eds. Springer, New York, New York.
24. Contributing editor: "Signal Transduction Events." In *Medical Cell Biology*, 3<sup>rd</sup> edition, S.R. Goodman, ed. Academic Press, 2007.
25. **Wagner, M.**, Shafiq, S., Mascareno, E., and Siddiqui, M.A.Q. (2001) Signal Transduction in Myofibrillogenesis, Cell Growth, and Hypertrophy. In *Myofibrillogenesis*, Springer-Verlag New York, Inc., New York, p. 143-152, D.K. Dube, ed.
26. **Wagner, M.**, Mascareno, E., and Siddiqui, M.A.Q. (1999) Cardiac Hypertrophy: Signal Transduction, Transcriptional Adaptation, and Altered Growth Control. In *Heart in Stress*, Ann. N.Y. Acad. Sci. 874, 1-10.
27. Ghatpande, S., **Wagner, M.**, and Siddiqui, M.A.Q. (1998). Molecular Adaptation of Transcriptional Apparatus in Cardiac Hypertrophy and Embryonic Development. In *Advances in Organ Biology*, Vol. 6, Myocardial Preservation and Cellular Adaptation," JAI Press, Stamford, Connecticut, p. 145-153, E.E. Bittar and D.K. Das, eds.
28. **Wagner, M.** (1998) Detection and measurement of retinoic acid production by isolated tissues using retinoic acid-sensitive reporter cell lines. In *Methods in Molecular Biology, Retinoid Protocols*. The Humana Press Inc. Vol 89, p. 41-53.