

Name Michael A. Herman

Title Associate Professor

Publications

- Hajuskova, M, Jindra, M, Herman, MA, Asahina, M. 2009. Nuclear receptor NHR-25 cooperates with Wnt/ β -catenin asymmetry pathway to control T cell differentiation in *C. elegans*. *J Cell Sci.*122:3051.
- Coolon, JD, Jones, KL, Carr, BC, Todd, TC, Herman, MA. 2009. *C. elegans* genomic response to soil bacteria predicts environment-specific genetic effects on life history traits. *PLoS Genetics*, 5(6): e1000503. doi:10.1371/journal.pgen.1000503.
- Herman, MA; Coolon, JD; Jones, KL; Todd, TC. 2009. Ecological Genomics of Nematode Community Interactions: Model and Non-model Approaches. In *Evolutionary Biology from Concept to Application II*, ed. by Pierre Pontarotti, Springer: Heidelberg, Germany, p. 303-321.
- Yu H, Seah A, Herman MA, Ferguson EL, Horvitz HR, Sternberg PW 2009. Wnt and EGF pathways act together to induce *C. elegans* male hook development. *Dev Biol*, 327: 419-432.
- Van Hoffelen, S. and Herman, M.A. 2009. Analysis of Wnt signaling during *C. elegans* postembryonic development. *Methods Mol Biol.*, 469, 87-102
- Van Hoffelen, S. and Herman, M.A. 2008. Analysis of Wnt signaling during *C. elegans* postembryonic development. in *Methods in Molecular Biology. Wnt signaling: Methods and model systems*. E. Vincan, Ed., Humana Press (Totawa, NJ), in press.
- Ungerer, M.C., Johnson, L.C., Herman, M.A. 2008 Ecological genomics: understanding gene functions in the natural environment. *Heredity*, 100, 178-183
- Kammenga, J.E., Herman, M.A., Ouborg, N.J., Johnson, L.C. and Breitling R. 2007 Microarray challenges in ecology, *TREE*, 22, 273-279
- Wu, M. and Herman, M.A. 2007. Asymmetric localization of LIN-17/Fz and MIG-5/Dsh are required for the asymmetric B cell division in *C. elegans*. *Dev. Biol.*, 303, 650-662.
- Ungerer, M.C., Johnson, L.C., Herman, M.A. 2007 Ecological genomics: understanding gene functions in the natural environment. *Heredity* advance online publication 23 May 2007; doi: 10.1038/sj.hdy.6800992
- Walston, T., Guo, C., Proenca, R., Wu, M. Herman, M., Hardin, J., Hedgecock, E. 2006. *mig-5/Dsh* controls cell fate determination and cell migration in *C. elegans*. *Dev. Biol*, 298: 485-497.
- Arata, Y., Kouike, H. Zhang, Y., Herman, M.A., Okano, H, and Sawa, H. 2006. The Wnt signal and Hox cooperate to express PSA-3/Meis, which determines specific daughter fates after asymmetric division in *C. elegans*, *Dev Cell*, 11, 105-115
- Jones, K.L., Todd, T.C., Coolon, J.D., Blair, J. M., and Herman, M.A. 2006. Molecular approach for assessing responses of microbial-feeding nematodes to burning and chronic nitrogen enrichment in a native grassland, *Mol. Ecol.*, 15, 2601-2609.

- Jones, K.L., Todd, T.C., and Herman, M.A. 2006 Development of taxon-specific markers for high-throughput screening of microbial-feeding nematodes, *Molecular Ecology Notes*, 6, 712-714.
- Wu, M. and Herman, M.A. 2006. A novel noncanonical Wnt pathway is involved in the regulation of the asymmetric B cell division in *C. elegans*. *Dev. Biol.* 293:316-329.
- Van Hoffelen, S. and Herman, M.A. 2006. Stem Cells: Specifying stem cell niches in the worm. *Curr. Biol.* 16, R175-177.
- Herman, M.A. Hermaphrodite cell fate specification. (January 09, 2006). in *WormBook*, ed. The *C. elegans* Research Community, Wormbook,doi/10.1895/wormbook.1.39.1, <http://www.wormbook.org>
- Hoepfner, D., Spector, M.S., Ratliff, T.R., Kinchen, J.M. Granat, S., Lin, S-C, Bhusri, S.S., Conradt, B., Herman, M.A., and Hengartner, M.O. 2004. *eor-1* and *eor-2* are required for cell-specific apoptotic death in *C. elegans*, *Dev. Biol.* 274, 125-138.
- Herman, M.A. and Wu, M. 2004. Noncanonical Wnt signaling pathways in *C. elegans* converge on POP-1/Tcf and control cell polarity. *Frontiers in Bioscience* 9, 1530-1539.
- Zhao, X. Sawa, H., and Herman, M. A. 2003. *tcl-2* encodes a novel protein that acts synergistically with the Wnt signaling pathway in *C. elegans*. *Dev. Biol.* 256, 276-289.
- Herman, M.A. 2003. Wnt signaling in *C. elegans*. In *Wnt signaling in Development*, M. Kühl, Editor. Landes Biosciences: Georgetown, TX, USA, pp.187-212
- Herman, M.A. 2002. Control of cell polarity by noncanonical Wnt signaling in *C. elegans*. *Semin. Cell Dev. Biol.* 13, 233-241.
- Zhao, X., Yang, Y., Fitch, D. H. A. and Herman, M. A. 2002. TLP-1 is an asymmetric cell fate determinant that responds to Wnt signals and controls male tail tip morphogenesis in *C. elegans*. *Development* 129: 1497-1502
- Herman, M.A. 2001. *C. elegans* POP-1/TCF functions in a canonical Wnt pathway that controls cell migration and in a noncanonical Wnt pathway to control cell polarity. *Development* 128, 581-590.
- Korswagen, H. C., Herman, M. A. and Clevers, H. C. 2000. Distinct beta-catenins mediate adhesion and signalling functions in *C. elegans*. *Nature* 406, 527-532.
Cited twice in Genetics and Development Paper Alert. *Current Opinion in Genetics & Development* 2000, 10, 581-589.
- Herman, M.A., Ch'ng, Q., Hettenbach, S.M., Ratliff, T.M., Kenyon, C., Herman, R.K. 1999. EGL-27 is similar to a metastasis-associated factor and controls cell polarity and cell migration in *C. elegans*. *Development* 126:1055-1064.
- Herman, M.A., Vassilieva, L.L., Horvitz, H.R., Shaw, J.E., and Herman, R.K. 1995. The *C. elegans* gene *lin-44*, which controls the polarity of certain asymmetric cell divisions, encodes a Wnt protein and acts cell nonautonomously. *Cell* 83:101-110.
- Herman, M.A. and H.R. Horvitz. 1994. The *Caenorhabditis elegans* gene *lin-44* controls the polarity of asymmetric cell divisions. *Development* 120:1035-1047.
- Soll, D.R., M.A. Herman, and M.A. Staebell. 1985. The involvement of cell wall expansion in the two modes of mycelium formation of *Candida albicans*. *J. General Microbiology* 131:2367-2375.

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Herman, M.A. and D.R. Soll. 1984. A comparison of volume growth during bud and mycelium formation in *Candida albicans*. *J. General Microbiology* 130:2219-2228.

Buffo, J., M.A. Herman, and D.R. Soll. 1984. A characterization of pH-regulated dimorphism in *Candida albicans*. *Mycopathologia* 85:21-30.

Soll, D.R. and M.A. Herman. 1983. Growth and inducibility of mycelium formation in *Candida albicans*: A single cell analysis employing a perfusion chamber. *J. General Microbiology* 129:2809-2824.