# Manitoba Neuroscience Network Seminar Series

## Friday, January 25th, 2013 | 9:00 am



### Dr. Tamra Werbowetski-Ogilvie Canada Research Chair in Neuro-oncology & Human Stem Cells

Canada Research Chair in Neuro-oncology & Human Stem Cells Assistant Professor, Regenerative Medicine Program Department of Biochemistry & Medical Genetics and Physiology University of Manitoba

Topic: Deconstructing medulloblastoma heterogeneity: targeting a spectrum of phenotypes.

Location: PX236/238 PsychHealth Bldg.

#### SHORT BIOSKETCH

- Assistant Professor | Regenerative Medicine Program, Department of Biochemistry & Medical Genetics & Physiology, University of Manitoba
- Honours Bachelor of Science in Biology, University of Western Ontario, London, ON
- PhD Neuroscience (Department of Neurology and Neurosurgery) Montreal Neurological Institute, McGill University, Montreal, QC.

#### Positions and Employment:

- August 2005-October 2010 PDF, McMaster Stem Cell and Cancer Research Institute, McMaster Univ.

- November 2010-present Assistant Professor, Regenerative Medicine Program, Department of Biochemistry & Medical Genetics And Physiology, University of Manitoba, Winnipeg, Manitoba, Canada

#### Selected Peer Reviewed Publications (Selected from 18 peer-reviewed publications)

1. Werbowetski T, Bjerkvig R, Del Maestro R. 2004. Evidence for a secreted chemorepellent that directs glioma cell invasion. Journal of Neurobiology 60(1): 71-88.

2. Werbowetski-Ogilvie TE, Seyed Sadr M, Jabado N, Angers-Loustau A, Agar NY, Wu J, Bjerkvig R, Antel J, Faury D, Rao Y, Del Maestro RF. 2006. Inhibition of medulloblastoma cell invasion by Slit. Oncogene 25(37) 5103-5112.

 Werbowetski-Ogilvie TE\*, Agar NY\*, Waldkircher de Oliveira RM, Faury D, Antel JP, Jabado N, Del Maestro RF. 2006. Isolation of a natural inhibitor of human malignant glial cell invasion: inter alpha trypsin inhibitor heavy chain 2. \*These authors contributed equally to this work. Cancer Research 66(3) 1464-1472.
Cerdan C, Bendall SC, Wang L, Stewart M, Werbowetski T, Bhatia M. 2006. Complement targeting of nonhuman sialic acid does not mediate cell death of human ESCs. Nature Medicine 12(10) 1113-1114.

5. Bendall SC, Stewart MH, Menendez P, George D, Vijayaragavan K, Werbowetski-Ogilvie T, Ramos-Mejia V, Rouleau A, Yang J, Bossé M, Lajoie G, Bhatia M. 2007. IGF and FGF cooperatively establish the regulatory stem niche of pluripotent human cells. Nature. 448:1015-1021.

6. Werbowetski-Ogilvie TE, Bossé M, Stewart M, Schnerch A, Ramos-Mejia R, Rouleau A, Wynder T, Smith MJ, Dingwall S, Carter T, Williams C, Harris C, Dolling J, Wynder C, Boreham D. Bhatia M. 2009. Characterization of human embryonic stem cells with features of neoplastic progression. Nature Biotechnology. 27:91-97

7. Ji JF\*, Werbowetski-Ogilvie TE\*, Zhong B, Hong SH, Bhatia M. 2009. Pluripotent transcription factors possess distinct roles in normal versus transformed human stem cells. \* These authors contributed equally to this work. PLoS ONE. 4:11

8. Werbowetski-Ogilvie TE, Schnerch A, Rampalli S, Lee JB, Levadoux-Martin M, Mills CE, Bhatia M. 2011. Evidence for the transmission of neoplastic properties from transformed to normal human stem cells. Oncogene. 30(46): 4632-44

9. Werbowetski-Ogilvie TE\*, Coudière Morrison L, Fiebig-Comyn A, Bhatia M\*. 2012. In vivo generation of neural tumors from neoplastic pluripotent stem cells models early human pediatric brain tumor formation. Stem Cells. 30(3): 392-404. \* Denotes co-corresponding authorship.

10. Coudière Morrison \*, McClelland R \*, Aiken C, Bridges M, Wang X, Del Bigio MR, Taylor MD, Werbowetski-Ogilvie TE. 2012. Deconstruction of medulloblastoma cellular heterogeneity reveals differences between the most highly invasive and self-renewing phenotypes. Under Review, Neoplasia.

For more information, contact the MNN Office at (T) 235.3939 or email: mnn@sbrc.ca

Presented in co-operation with University of Manitoba Clinical Neuroscience Rounds

