Ph.D. GRADUATE STUDENT AND POST-DOC

Dr. Christine Vande Velde is looking to recruit a Graduate Student (PhD) and a PostDoc to her laboratory located at the CRCHUM facility, a research center affiliated with the Université de Montréal and located in Downtown Montreal.

Our lab is focused on understanding the molecular pathways that contribute to motor neuron degeneration in amyotrophic lateral sclerosis (ALS; also known as Lou Gehrig's disease and Maladie de Charcot). Techniques include molecular biology, biochemistry, cell biology, and microscopy. We use both tissue culture and transgenic rodent models of disease. Projects include characterizing the role of TDP-43 in RNA granule dynamics, defining pathogenic mechanisms induced by misfolded SOD1, and exploration on hnRNP A1 in ALS biology. We are a young dynamic and bilingual team and we would like to add highly motivated individuals to the current crew.

Salary will be based on institutional/CIHR guidelines.

Please submit your CV, your transcripts, and the names and contact information of three referees to c.vande.velde@umontreal.ca. Potential candidates will be contacted for an interview.

Selected Papers

K.K. McDonald, A. Aulas, L. Destroismaisons, S. Pickles, E. Beleac, W. Camu, G.A. Rouleau, and **C. Vande Velde**. (2011). TAR DNA-Binding Protein 43 (TDP-43) regulates stress granule dynamics via differential regulation of G3BP and TIA-1. *Human Molecular Genetics* 20:1400-1410.

C. Vande Velde*, K.K. McDonald, Y. Boukhedimi, M. McAlonis-Downes, C.S. Lobsiger, S. Bel Hadj, A.N. Zandona, J.P. Julien, S.B. Shah and D.W. Cleveland*. (2011). Misfolded SOD1 associated with motor neuron mitochondria alters mitochondrial shape and distribution prior to clinical onset. PLoS One 6:e22031. *co-corresponding author.

S. Pickles and **C. Vande Velde**. (2012) Misfolded SOD1 and ALS: Zeroing in on mitochondria. *Amyotrophic Lateral Sclerosis* 13: 333-340. (invited review).

A. Aulas, S. Stabile and **C. Vande Velde**. (2012). Endogenous TDP-43, but not FUS, contributes to stress granule assembly via G3BP. *Molecular Neurodegeneration* 7:54.

S. Pickles, L. Destroismaisons, S.L. Peyrard, S. Cadot, R.H. Brown Jr, G.A. Rouleau, J.P. Julien, N. Arbour and **C. Vande Velde**. (2013). Mitochondrial damage revealed by immunoselection for ALS-linked misfolded SOD1. *Human Molecular Genetics* 22: 3947- 3959.

A. Aulas, G. Caron, C.G. Gkogkas, N.-V. Mohamed, L. Destroismaisons, N. Sonenberg, N. Leclerc, J.A. Parker, and **C. Vande Velde**. (2015). G3BP1 promotes stress-induced RNA granule interactions to preserve polyadenylated mRNA. *Journal of Cell Biology* 209: 73-84.