

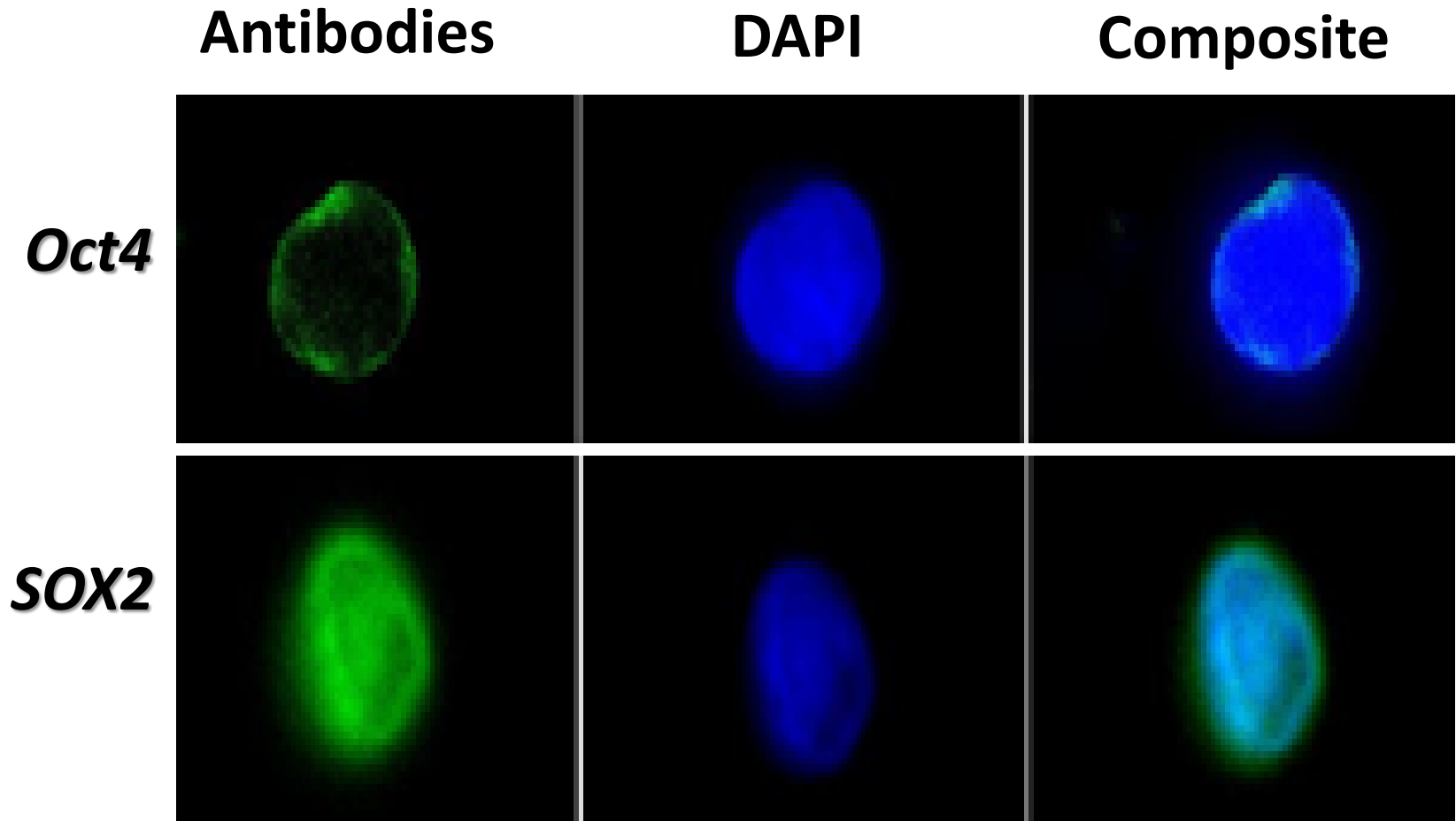
The application of multi-lectin affinity chromatography in the analysis of membrane glycoproteins

Michelle Lawson

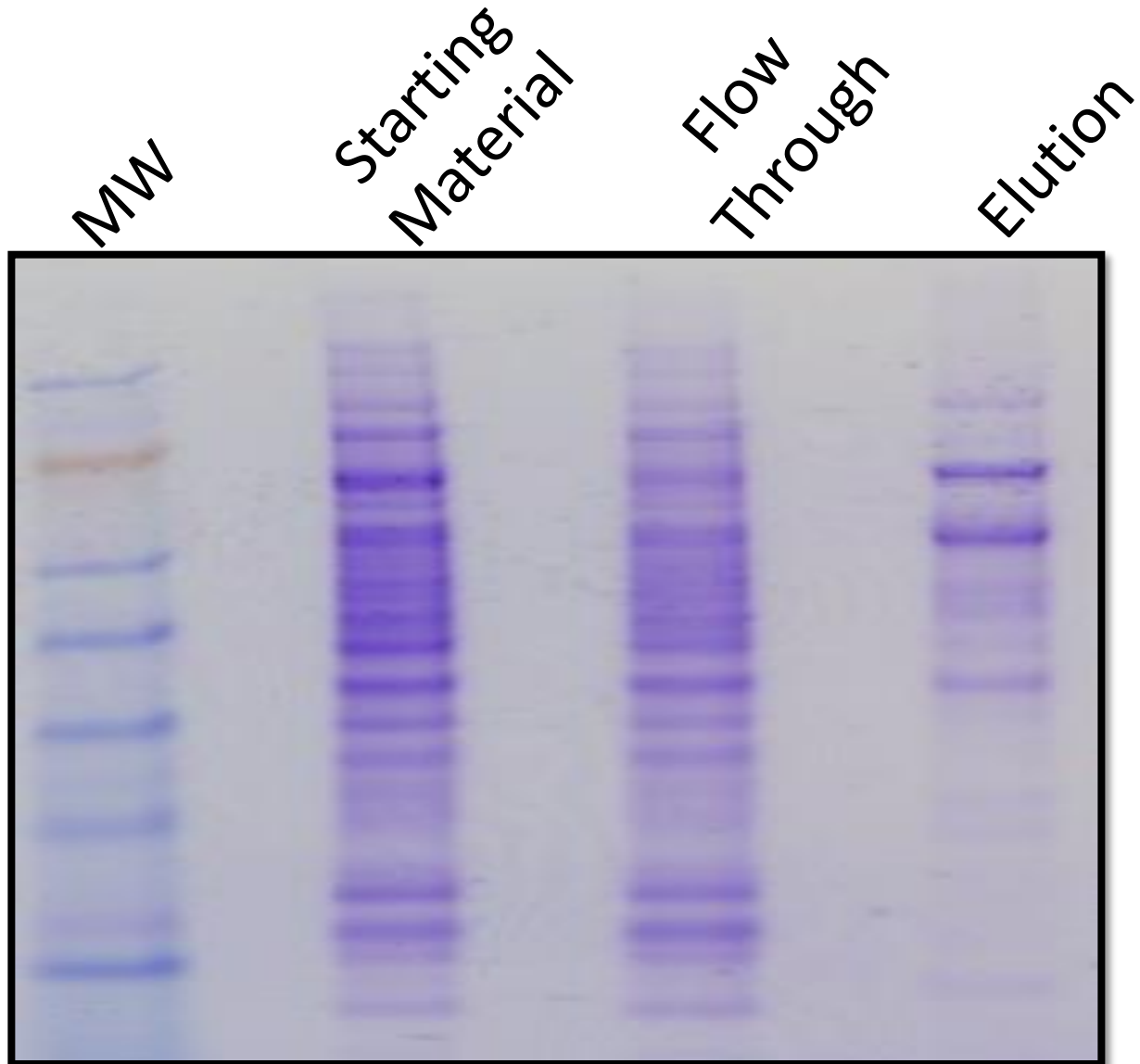
Basics

- Biomarkers
- Membrane glycoproteins
- Lectin Affinity Chromatography

Neural Stem Cells



Neural Stem Cell Gel



Sources

- [1] Ghosh D, Krokhin O, Antonovici M, Ens W, Standing KG, Beavis RC & Wilkins JA. (2004). Lectin Affinity as an approach to the proteomic analysis of membrane glycoproteins. *Journal of Proteome Research* 3(4), 841-850.
- [2] Lullolli, M., Hancock, W.S., Hincapie, M. (2010). Automated platform for fractionation of human plasma glycoproteome in clinical proteomics. *Anal of Chemistry* 82(1), 115-120.
- [3] McDonald C. A., Yang, J. Y., Marathe, V., Yen, T., & Macher, B. A. (2009). Combining results from lectin affinity chromatography and glycocapture approaches substantially improves the coverage of the glycoproteome. *Molecular & Cellular Proteomics*, 8(2), 287-301.
- [4] Schiess, R., Wollscheid, B., & Aebersold, R. (2009). Targeted proteomic strategy for clinical biomarker discovery. *Molecular Oncology*, 3, 33-44.
- [5] Wang, Y.F., Ao, X.P., Vuong, H., Konanur, M., Miller, F.R., Goodison, S. & Lubman, D.M. (2008) Membrane glycoproteins associated with breast tumor cell progression identified by a lectin affinity approach. *Journal of Proteome Research*, 7, 4313-4325.

Acknowledgments

- Dhiman Ghosh
- Patrick Flores
- Cecilia Garmendia
- Institute for Systems Biology
- Center for Systems Biology/P50-GMO76547
- NSBCC: 11670105