Representative McGill SPR-MS Facility Publications

SPR (McGill University)
Li, C., Hancock, M.A., Sehgal, P., Zhou, S., Reinhardt, D.P., & Philip, A. **(2016)** Soluble CD109 binds TGF-beta and antagonizes TGF-beta signalling and responses. ***Biochemical Journal*** 473:537-547. → www.ncbi.nlm.nih.gov/pubmed/26621871

SPR (Université de Montréal)
Casu, B., Smart, J., Hancock, M.A., Smith, M., Sygusch, J., & Baron, C. **(2016)** Structural analysis and inhibition of TraE from the pKM101 type IV secretion system. ***The Journal of Biological Chemistry*** 291:23817-23829. → www.ncbi.nlm.nih.gov/pubmed/27634044

SPR (McGill University)
Wieczorek, M., Tcherkezian, J., Bernier, C., Prota, A.E., Chaaban, S., Rolland, Y., Godbout, C., Hancock, M.A., Arezzo, J.C., Ocal, O., Rocha, C., Olieric, N., Hall, A., Ding, H., Bramoulle, A., Annis, M.G., Zogopoulos, G., Harran, P.G., Wilkie, T.M., Brekken, R.A., Siegel, P.M., Steinmetz, M.O., Shore, G.C., Brouhard, G.J., & Roulston, A. **(2016)** The synthetic diazonamide DZ-2384 has distinct effects on microtubule curvature and dynamics without neurotoxicity. ***Science Translational Medicine*** 8:365ra159. → www.ncbi.nlm.nih.gov/pubmed/27856798

MALDI-MS (McGill University)
Oestereich, F., Bittner, H.J., Weise, C., Grohmann, L., Janke, L.K., Hildebrand, P.W., Multhaup, G., & Munter, L.M. **(2015)** Impact of amyloid precursor protein hydrophilic transmembrane residues on amyloid-beta generation. ***Biochemistry*** 54:2777-2784. → www.ncbi.nlm.nih.gov/pubmed/25875527

MALDI-MS (McGill University)
Barucker, C., Bittner, H.J., Chang, P.K.-Y., Cameron, S., Hancock, M.A., Liebsch, F., Hossain, S., Harmeier, A., Shaw, H., Charron, F.M., Gensler, M., Dembny, P., Zhuang, W., Schmitz, D., Rabe, J.P., Rao, Y., Lurz, R., Hildebrand, P.W., McKinney, R.A., & Multhaup, G. **(2015)** Abeta42-oligomer Interacting Peptide (AIP) neutralizes toxic amyloid-beta42 species and protects synaptic structure and function. ***Scientific Reports*** 5:15410. → www.ncbi.nlm.nih.gov/pubmed/26510576

MALDI-MS (McGill University)
Bloudoff, K., Alonzo, D.A., & Schmeing, T.M. **(2016)** Chemical probes allow structural insight into the condensation reaction of nonribosomal peptide synthesis. ***Cell Chemical Biology*** 23:331-339. → www.ncbi.nlm.nih.gov/pubmed/26991102

ESI-MS (McGill University)
Trempe, J.F., Šašková, K.G., Sivá, M., Ratcliffe, C.D., Veverka, V., Hoegl, A., Ménade, M., Feng, X., Shenker, S., Svoboda, M., Kožíšek, M., Konvalinka, J., & Gehring, K. **(2016)** Structural studies of the yeast DNA damage-inducible protein Ddi1 reveal domain architecture of this eukaryotic protein family. ***Scientific Reports*** 6:33671. → www.ncbi.nlm.nih.gov/pubmed/27646017

ESI-MS (Montreal Neurological Institute)
Tang, M.Y., Vranas, M., Krahn, A.I., Pundlik, S., Trempe, J.F., & Fon, E.A. **(2017)** Structure-guided mutagenesis reveals a hierarchical mechanism of Parkin activation. ***Nature Communications*** 8:14697. → www.ncbi.nlm.nih.gov/pubmed/28276439