

Sample checklist for LCMSMS analysis

(March, 2015)

Sample Preparation

- 1) Did you prepare your sample using one of the standard CPR methods?
- 2) Has digest been run on gel to check for complete digestion?
- 3) Have you checked sample for acidification?
- 4) If not, have you listed every buffer component and had them checked by someone senior?
- 5) Is your sample in a total/maximum recovery vial?
- 6) Did you spin it in a microfuge at max rpm for 10 min before transferring it to the Waters vial?
- 7) Did you check sample was at bottom of Waters vial (no air bubbles)?
- 8) Do you know how much protein you are loading onto the system? Can you estimate the complexity of the sample? Are you loading the correct amount onto the column based on the sample complexity?
- 9) If you do not know the amount or complexity have you prepared a dilution series to safely test the amount or complexity?

Instrument Preparation

- 1) Did you run the calibration (QC) protocols?
- 2) Were the results satisfactory?
- 3) Have you checked your sequence for syntax and typing errors?
- 4) Have you double checked that your sequence and sample locations correlate?
- 5) Is there enough disk space?
- 6) Are there enough HPLC reagents to last the duration of your run and checked waste bottle also if blanks are to be used need to check contents of blank vial?

During/After the run

- 1) Did you watch the autosampler go to the correct vial for the first sample?
- 2) Did you wait for the MS to start following the trapping period for the first sample?
- 3) Did you assess your pre run QC data before running samples?
- 4) Did you make a note of starting conditions so you can monitor system through run?
- 5) Did you return to the instrument periodically to check everything was O.K.?
- 6) Was the post-run QC sample O.K.?
- 7) Have you blogged your QC?
- 8) Was the next user happy about the state of the instrument when you handed it over?
- 9) Have you left instrument safe in case there is a delay before next user (enough buffer if instrument is not going to be used).