**Review of literature for state-space assessment project**

2014, Nielsen & Berg, *Estimation of time-varying selectivity in stock assessments using state-space models*, Fisheries Research.

Define selectivity at age a in year y as Sa,y = Fa,y / suma(Fa,y)

Explored four different structures on Fa,y:

(1) Perfectly correlated F’s (rho =1)

(2) Uncorrelated F’s (rho = 0)

(3) A single, identical correlation for all ages (rho = x, termed compound symmetry)

(4) Correlation between ages is an AR(1) function of difference between ages (rho = x|age diff|)

Simulation tested using north sea cod case (N = 100). And a north sea cod case study.