**MSBBSS08 Introduction to Biomedical Statistics 2018**

**Case study 3**

**Otitis media and BMI**

Researchers are interested in the effect of BMI on the occurrence of otitis media (OM) in young children. The number of OM episodes is extracted from medical records for 1759 of children from ages 6 months to 4 years, along with BMI of the child at six months of age, follow-up time for each child, and a number of potential confounders.

**Assignment:**

Please read the case study guidelines on Blackboard before proceeding.

Write an abstract, the Statistical Methods and the Results sections for a journal publication that answers the research question.

The following variables are available in the SPSS file ‘**otitismedia.csv**’:

pid Patient identification number

sex sex of child (1=boy, 2=girl)

Preg\_smoking Mother smoked during pregnancy (0=no, 1=yes)

siblings Other children in home (0=no, 1=yes)

daycare Child ever went to day care (0=no, 1=yes)

educ\_par Parental education (0=Neither parent higher degree, 1=one or both

parents have higher degree)

passivesm Child exposed to passive smoking (0=no, 1=yes)

Excl\_BF Duration of exclusive breast feeding (0=only bottle; 1=0-3 months,

2=3-6 months, 3=more than 6 months)

overwt6mo Child overweight at 6 months

OM\_after6mo Number of OM episodes after 6 months of age

fup\_6mo Follow-up time from 6 months of age (weeks)

BMI\_6mo BMI of child at 6 months of age