

## NOTES FOR EXERCISES IN SESSION 9

- 9:39,36,38,48,50,52; x:16; 9:40,20,44 (8:67,103; 9:62)
- midterm 2016, for last practice before Wednesday...

### Outline of lab session:

- lecture catch-up: Fisher's exact test and Simpson's paradox (9L–15/16/17) and sample size calc. (8L–17),
- Minitab software hints for 2-way tables<sup>1</sup>: use menu  
\* Stat-Tables-Cross Tabulation and Chi Square,
- individual work on the exercises.

### Notes and questions for specific exercises:

- Don't forget the models and the conclusions! (2-way table analysis is more than computing the  $X^2$ -statistic!)
- 8.103: an extra sample size problem, with a formula for two independent proportions.
- 9.20: try Fisher's exact test (using software), and compare with the  $X^2$ -test,
- 9.36, 9.38: forget about the graphical displays,
- 9.20, 9.62: solutions contain discussion of textbook definitions of response and explanatory variables...,
- x.16: practice of model choice in 2-way tables.

---

<sup>1</sup> Stata: Stat-Summaries-Frequency Tables-Twoway table/Table calculator;  
R functions: `xtabs`, `chisq.test`, `fisher.test`.