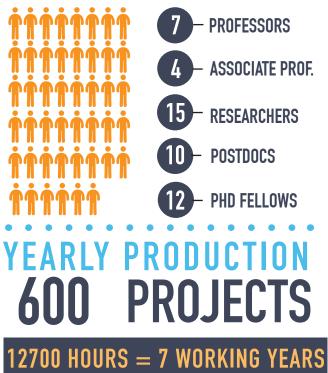
## CONTACT OCBE USING THE LINK INSIDE >>

UiO : Universitetet i Oslo

Oslo Center of Biostatistics and Epidemiology (OCBE) is a joint group of biostatisticians and epidemiologists at OUS and at UiO. It is one of the largest such groups in Europe. We cover a broad variety of statistical methods. One of our aims is to provide researchbased statistical advising that has an impact.

### **OCBE BY THE NUMBERS**



# **OCBE's** Advising service

rds vary over more than one time ith the Poisson regression framewith several time scales. Another for more flexible modeling of how tive hazards models. m, Section 6.3 Poisson regression isson data. The main section, Secression

outcomes on integers  $0, 1, 2, ..., \lambda$ , denoted  $Y \sim Po(\lambda)$ , then

that are independent and the set of the set

The most common version of Poisson regre

 $\lambda_{i} = \lambda_{0} e^{\beta ' x}$ 

where  $\lambda_{\eta}$  is the mean of  $Y_i$  if all covariate values  $x_{\eta} = 0$ , write  $\lambda_{\eta} = e^{\beta_{\eta}}$  so that  $\beta_{\eta}$  becomes the intercept in  $\beta_{\eta} + \beta_{\eta}x_{\eta} + \beta_{\eta}x_{\eta} + \cdots + \beta_{\eta}x_{\eta}$ . Interpretation of the regress obtained by inspecting *rate ratios* 

 $RR_j = e^{\beta_j} = \frac{\lambda_i}{\lambda_i}$ 

where the covariates for individuals *i* and *i'* are equal, except on co for which  $x_{ij} = x_{ij} + 1$ . Thus  $\beta_j$  is the logarithm of a rate ratio.

#### Example 6.1

We are interested in whether the rate of asthma attacks is associa smoking. The Poisson regression model is

 $\lambda = e^{\beta_0 + \beta_1 x_1},$ 

where for simplicity we assume that all individuals are observed same length of time and have dropped the index *i* in  $x_a$  since we consider two individuals. The same  $x_a = \frac{1}{2} - \frac{1}{2} \frac{A^2 A}{A}$  for exceden



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#### ho can get advice?

All researchers affiliated with OUS or hospitals under HelseSør-Øst and researchers and PhD students at the Faculty of Medicine at UiO.

#### w do I apply for advice?

You apply by submitting a web-form on our website:

>>https://www.med.uio.no/imb/english/research/centres/ocbe/ advising/how-to-apply

#### hat can I expect?

We aim to improve on the use of statistics in health research. In practice this means choosing the proper method, suitable for the clinical question. Sometimes a simple approach suffices, other times more advanced methods are needed, but it always has to be a correct method for the data. The purpose of the advising is to provide you with tools for you to solve your problem. We usually do not analyse data. You will meet with a biostatistician for one hour. Here your needs for statistical advising will be discussed and potentially be resolved. If needed, you and the advisor may decide to have additional meetings. In some cases you may also agree to extend the collaboration into a so-called single-project support or a long-term collaboration. All request begin with a policlinic session.

#### hen should I apply for advice?

You can expect to have a meeting within **7-10** days after submitting an application. It is a good idea to submit your request in good time before you need the answer. It is also advisable to meet with a statistician in the planning phase of a study, to ensure sampling of valid data.

#### w do I prepare for the advice?

Please, consider carefully:

•A clear and short description of your project: What is the overall aim? Avoid information of no relevance for the statistical advice

•A clear and short description of your clinical hypothesis. E.g. Treatment A is superior to B

•A clear and short description of the essential data: What is the outcome vari-

able? The exposure? Are patients measured multiple times? •A clear and short description of what help you seek

#### hat about co-authorship?

Sometimes advising leads to a collaboration on an article, with obvious advantages and more responsibilities on both sides. We always welcome an open talk on this issue and encourage that mutual expectations are clarified at an early stage.



I CAN'T BELIEVE SCHOOLS

ARE STILL TEACHING KIDS

I REMEMBER READING A BIG

