**Statistical methods in Cancer epidemiology using R - 2 ECTS**

**Course instructors:**

Prof. Janne Pitkäniemi (JP) and PhD Karri Seppä (KS)

**Lectures & computer practicals**

Period III Monday 10.2.2020 – Basic tabulations using R and analysis of proportions (JP)  
Monday 17.2.2020 – Analysis of proportions and case-control studies (JP)  
Monday 2.3.2020 – Analysis of rates (KS)  
Monday 9.3.2020 – More than one time scale and SIR, SMR (KS)

Period IV Monday 23.3.2020 – Population-based cancer survival (KS)  
Monday 30.3.2020 – Long-term survival (JP)

**Daily program skeleton\***

**Lecture 9.15-10**

**Computer practical 10.15-12.00 (with 15 min break)**

**Lunch 12.00-13.00**

**Lecture 13.15-14**

**Computer practical 14.15-16.00 (with 15 min break)**

**\* 30.3. class ends at 12**

**Course description**

The cancer epidemiology course consists of several themes relevant to the analysis population-based cancer data using R-program. Analysis of proportions and rates, rates on several time scales and population-based survival are covered. Finally, statistical methods and tools to analyze long-term survival are presented.

The aim of the course is to be able to tech skills for practical basic epidemiological data, emphasizing time-to-event analysis and methods.

**Pre-requisites:**

Basic epidemiology

**Target audience:**

Doctoral students, researchers, master’s students with sufficient prior knowledge.

**Evaluation:** Pass/fail