



## Romcan - practical training session

September, 2016

### Participants:

Statistic department, INSP: Violeta Calota, Catalin Staicu, Angi Voinoiu and Irma Csiki

Genetic department, UMF : Viorica Radoi and Radu Ursu

CCIMC department, UMF: Elena Poenaru

Teachers: Andrei Manolescu, Tórunn Rafnar and Bjarni V. Halldórsson

Teacher Assistent : Paul Iordache

### Schedule:

#### **19.09.2016 – Introductory session - H.R.**

- Review of the developments of Romanian Projects (PCa risk paper and Obesity paper)
- State of the Romanian data \ Prostate cancer paper on the imputed data.
- State of the art in prostate cancer GWAS

#### **20.09.2016 - High-penetrance mutations in cancer genes - DeCODE**

- Familial breast and colorectal cancer - overview

Whole-genome sequencing of Romanian breast and colorectal cancer cases

- Search for mutations in cancer genes
- Follow-up on findings from whole-genome sequencing using public databases

<http://healthcare.utah.edu/huntsmancancerinstitute/research/cancer-genetics/cancer-susceptibility/>

InSight variant database <http://insight-group.org/variants/database/>

**21.09.2016 - Discussions about genetic paper writing (Bjarni V. Halldórsson)**

- Manhattan plots, qq plots
- Effect, Odds ratio
- Statistics

**22.09.2016 –Online tools and resources - DeCODE**

- Evaluating gene expressions and micrarrys, QTL analysis
- Gene-gene interactions, gene pathways
- PLINK, GTEX, BioGPS, broadinstitute.org etc.

**23.09.2016 - Final session – H.R**

- Conclusions and workshop results
- Future developments