139th ICB SEMINAR

Ninth International Seminar

on

STATISTICS AND CLINICAL PRACTICE

Chairmen:

> **Prof. Leon Bobrowski**
> **Prof. Ulrich Mansmann**
> **Dr. Cornelia Enăchescu**

WARSAW, June 1 – 4, 2014

PROGRAMME OF THE SEMINAR

Sunday, **June 1**

GET TOGETHER PARTY FOR LECTURERS
AND ACCOMPANYING PERSONS
16:30 – 18:00

Monday, **June 2**

OPENING OF THE SEMINAR
11:00 – 11:15
WELCOME ADDRESS by Marek Darowski (Poland)
Director of the Nałęcz Institute of Biocybernetics and Biomedical
Engineering of the Polish Academy of Sciences
Acting Director of the International Center of Biocybernetics

11:15 – 11:50 Ulrich Mansmann (Germany) *How to handle survival time estimates in randomized controlled trials with treatment switching?*

11:50 – 12:25 Jana Zvárová, K. Chleborád, K. Zvára, T. Dostálová (Czech Republic*) Electronic oral health record for decision support in dentistry*

12:25 – 13:00 Jan Czerniecki, Robert Milewski, Sławomir Wołczyński (Poland) *Practical application of DNA as data storage system*

13:00 - 14:00   *LUNCH BREAK*

14:00 - 14:30 Tomasz Burzykowski, J. Claesen, F. Zamanzad Ghavidel (Poland, Belgium) *Analysis of gene-mapping experiments based on whole-genome sequencing data by using hidden markov-models*

14:30 - 15:00 Zdenek Valenta, Jan Kalina (Czech Republic) *Exploiting stein's paradox in analysing sparse data from gwas studies*

15:00 - 15:30 Leon Bobrowski (Poland) *Discovering collinear (flat) patterns in multivariate data sets by using CPL functions*

15:30 - 16:00   *COFFEE BREAK*

16:00 - 16:30 Frank Konietschke, Tim Friede (Germany) *On the analysis of treatment effects with time varying over-dispersed count data*

16:30 - 17:00   **Arthur Allignol**, **Reinhard Meister** (Germany) *Pregnancy outcome studies following drug exposure –- some statistical issues*

Tuesday, June 3

10:00 – 10:30 **Tadeusz Łuba**, **Grzegorz Borowik**, **Andrzej Kraśniewski**, **Piotr Rutkowski**, **Iwona Ługowska** (Poland) *Application of logic synthesis algorithms for data mining in medical databases*

10:30 – 11:00 **Franciszek Bińczyk**, **Anna Hebda**, **Paweł Ulrych**, **Barbara Bobek-Billewicz**, **Joanna Polańska** (Poland), *Delineation of brain tumour margins using Gaussian mixture model based segmentation of the apparent diffusion coefficient maps*

11:00–11:30 **Anita Pramoda** (USA), **Mariusz Ferenc**, **Wojciech S. Kozłowski** (Poland) *Automatic early detection and rating of mild cognitive impairment through verification of moto skills on the basis of the clock drawing test*

11:30 - 12:00   *COFFEE BREAK*

12:00 – 12:30 **Denis Enăchescu**, **Cornelia Enăchescu** (Romania) *Machine learning strategies for prediction with highly imbalanced datasets*

12:30 - 13:00 **Jan Komorowski** (Poland, Sweden) *Rule networks and interaction detection using rule-based classifiers*

13.00 – 13.30 **Anna Wolińska-Welcz**, **Agnieszka M. Mirek** (Poland) *Multivariate grade methods in clinical research on connections between coronary artery disease and arteriosclerosis in carotid arteries*

13.30 – 14.00 **J.Janowicz**, **Wojciech Glinkowski** (Poland) *Clinical methodologies and statistical testing in Polish orthopaedic literature based on the review of 2012 annals of two journals*

14:00 - 15:00   *LUNCH BREAK*

Magdalena Bogdańska
Classification of high grade gliomas

Izabela Chmiel, Maciej Górkiewicz
Measuring physical ability among convalescents on the base of patient-reported quality of life: Statistical support for credibility of an individual patient's report

Dorota Citko, Dorota Jankowska, Robert Milewski
Analysis of sensitization to some aeroallergens using ordinal logistic regression

Małgorzata Ćwiklińska-Jurkowska, Magdalena Wietlicka-Piszcz
Accuracy of the genes ranking by permutation tests, impurity measures and combined selection method for classification of microarray data set

Agnieszka Gniadek, Izabela Chmiel, Maciej Górkiewicz
Multi–criteria ranking under pareto criterion: an application to ranking fungi species with respect to their toxicity

B. Glinkowska, Izabela Czyżak, Wojciech Glinkowski
Back pain infodemiology among children and adolescents internet based survey study in medium size town

Małgorzata Krętowska
Tree-based models in application to competing risks - an overview

Leon Bobrowski, Tomasz Łukaszuk
Examples of prognostic models selection on the base of linear separability

Paweł Malinowski
Genetic pattern search using margin-based algorithm

Andrzej Walczak, Edyta Winciorek
Integrating Bayesian networks into fuzzy hypothesis testing problem - case based presentation

Wednesday, June 4

Statistical standards in medical research projects and publications

Chair: **Ewa Kawalec**

The special session addressed to medical doctors organized by the Polish National Group of the International Society for Clinical Biostatistics (ISCB)

10:00 - 10:30 Maciej Karcz
Examples of statistical methods in medical papers

10:30 – 11:00 Maciej Górkiewicz
Detecting patient's random answers to questionnaire with opposite items and the shifted population norm

11:00 – 11:15 Ewa Wiercińska, Marcin Wiecheć
Methods for evaluation of diagnosis - indicators of validity, reliability and repeatability

11:15 - 11:45   *COFFEE BREAK*

11:45 – 12:15 Anna Justyna Milewska, Robert Milewski
Comparison of classical statistical methods, basket analysis and correspondence analysis for evaluation of the age and hospitalization time of patients treated at the gynecological ward

12:45 – 13:00 Anna Wolińska-Welcz
Statistical inference in analysis of clinical data

13:00 – 13:15 Kinga Sałapa, Piotr Mazur, Anetta Undas
Modeling of the fibrin clot and fibrinolysis reported in hyperthyroidism by structural equations

13:15-13:30 Discussion and questions from medical doctors

13.30-13:45 Current ISCB information and close of the session