

# CASI 2006

## *Detailed Oral Presentation Programme*

**Plenary session 1:** 17<sup>th</sup> May, 2:00 pm – 3:35pm

**Chairman:** Gilbert Mackenzie, University of Limerick

**James Hanley**, McGill University, Montreal

*A finely stratified log-rank test with effectively-infinite-size comparison groups*

**John Crowley**, University of Washington, Seattle and C.R.A.B.

*Challenges and Opportunities for Statisticians in Cancer Research*

**Parallel session 1-a):** 17<sup>th</sup> May, 3:55pm-5:15pm

**Chairman:** tba

**Adele Marshall**, Centre for Statistical Science and Operational Research, Queen's University Belfast, Northern Ireland, UK

*Graphical Modelling of Characteristics of ARMD Patients*

**Emma Murphy**, Mathematics Department, NUI Maynooth, Ireland

*Regression Modelling of Treatment for Opiate Drug Use*

**Michael Cronin**, Dept. of Statistics, University College Cork, Ireland

*The Development of Quality and Probity Assurance within a Government Funded Dental Service*

**Paul David McNicholas**, Dept. of Statistics, Trinity College, Dublin, Ireland

*Parsimonious Gaussian Mixture Models*

**Parallel session 1-b):** 17<sup>th</sup> May, 3:55pm-5:15pm

**Chairman:** John Haslett, Trinity College Dublin

**Michael Hawkins**, School of Mathematical Sciences, University College Dublin, Ireland

*Using a statistical model to investigate mitigation strategies for nitrous oxide emissions from Irish soil*

**Caroline Brophy**, School of Mathematical Sciences, University College Dublin, Ireland

*Modelling reproductive allocation in *Sinapis arvensis**

**Bilal Al Momani**, School of Computing and Information Engineering, University of Ulster at Coleraine, Northern Ireland, UK

*Using Contextual Knowledge to Improve the Classification of Remotely Sensed Data*

**Andrew Parnell**, Dept. of Statistics, Trinity College Dublin, Ireland  
*Bayesian Palaeoclimate Reconstruction*

**Plenary session 2:** 18<sup>th</sup> May, 9:00 am – 10:35am  
**Chairman:** John Hinde, NUI, Galway

**Grace Wahba**, University of Wisconsin, Madison  
*Regularized kernel estimation from noisy, incomplete, inconsistent dissimilarity information*

**Dennis D. Cox**, Rice University,  
*Multilevel Classification in Quantitative Cytology*

**Parallel session 2-a):** 18<sup>th</sup> May, 10:55am- 12:35pm  
**Chairwoman:** Gabrielle Kelly, University College Dublin

**Gilbert MacKenzie**, University of Limerick, Ireland  
*Model Selection Criteria for Frailty Models*

**Derek Bond**, School of Business, Retail and Financial Services, University of Ulster at Coleraine, Northern Ireland, UK  
*Non-linear regression, random fields and long memory in time series models*

**Mathias Lundin**, Department of Statistics, Umeå University, Sweden  
*Sensitivity analysis of the unconfoundedness assumption in observational studies*

**Robert Stapleton** School of Mathematical Sciences, University College Dublin, Ireland  
*Fractional Factorial Split-Plot Row-Column Designs*

**Ronan Donaghy**, Centre for Statistical Science and Operational Research, Queen's University Belfast, Northern Ireland, UK  
*An approach for estimating the parameters of a Coxian phase-type distribution*

**Parallel session 2-b):** 18<sup>th</sup> May, 10:55am- 12:35pm  
**Chairman:** Kevin Hayes, University of Limerick

**David Clifford**, CSIRO, Australia  
*Statistical Problems with Liquid Chromatography Mass Spectrometry data*

**Samuel Manda**, Biostatistics Unit, University of Leeds, UK  
*Bayesian mixture modelling of the variance for differential gene expression data*

**Jian Huang**, Dept Statistics, University College Cork, Ireland  
*Smooth segmentation of array comparative genomic hybridization data*

**Rebecka Jornsten**, Department of Statistics, Rutgers University USA  
*Clustering of miRNA and mRNA expression via rate-distortion based model selection*

**Garry Mahon**, Research on Cancer and Blood Disorders, Centre Hospitalier,  
Luxembourg  
*A multivariate analysis of promoter sequences*

**Plenary session 3:** 18<sup>th</sup> May, 2:00 pm – 3:50pm  
Chairman: Joe Treacy, Central Statistics Office

**Frances Ruane**, Trinity College, Dublin  
*Putting Statistics at the Centre of Decision Making*

**Jon Hall**, OECD  
*Statistics, knowledge, policy: An OECD world forum to strengthen the nexus between statistics and policy making*

**Ger Healy**, Central Statistics Office, Cork, Ireland  
*What are Irish people entitled to expect from their statistical system and are they really getting it?*

**Parallel session 3-a):** 18<sup>th</sup> May, 4:10pm- 5:50pm  
Chairwoman: Sally McClean, University of Ulster

**Brendan Murphy**, Dept. of Statistics, Trinity College, Dublin, Ireland  
*Latent Space Models for Ranking Data*

**Claire Gormley**, Dept Statistics, Trinity College Dublin, Ireland  
*Mixture Models for Ranking Data*

**Richard Bolstein**, Dept. of Applied & Engineering Statistics, George Mason University,  
USA  
*Teaching Survey Sampling*

**Nick Sofroniou** Educational Research Centre, Dublin, Ireland  
*Random Effects Models for Scoring Disadvantage in Irish Primary Schools*

**Parallel session 3-b):** 18<sup>th</sup> May, 4:10pm- 5:50pm  
Chairman: Patrick Bourke, University College Cork

**Denis Conniffe**, Economics Department, NUI Maynooth, Ireland  
*Generalised Means, Generalised Entropy and Rules for Picking Investments*

**Karsten Keller**, Institute of Mathematics, University Lübeck, Germany  
*Ordinal Time Series Analysis*

**Vaida Bartkutė**, Institute of Mathematics and Informatics, Vilnius, Lithuania  
Utena College, Utena, Lithuania  
*Application of order statistics to terminate the Heston model calibration procedure*

**Sufi M. Nazem**, University of Nebraska at Omaha, USA  
*Time Series Models In The Securities Industry: Does The Moving Average Process Hold Any Clue In Prediction Of Stock Prices*

**Plenary session 4:** 19<sup>th</sup> May, 9:00 am – 10:35am  
**Chairman:** Finbarr O’Sullivan, , University College Cork

**Vincent Cunningham**, Glaxo Smith Kline  
*Identifiability of Radioligand Binding Parameters using Positron Emission Tomography*

**David Giltinan**, Genentech Inc.  
*Using Population Pharmacokinetic and Pharmacodynamic Modeling to Guide Dosing in Drug Development when the ‘Average Patient’ Does Not Exist*

**Parallel session 4-a):** 19<sup>th</sup> May, 10:55am- 12:35pm  
**Chairman:** John Connolly, University College Dublin

**Jochen Einbeck**, Department of Mathematics, NUI, Galway, Ireland  
*Random Effect Modelling for Regression Models with Gamma-Distributed Response*

**Paul Wilson**, Department of Mathematics, NUI Galway, Ireland  
*A Comparison of Methods for Choosing between non--nested Models*

**Joe Condon**, Centre for Statistical Science and Operational Research, Queen's University Belfast, Northern Ireland, UK  
*A Long-Term Study of the Impact of Proactive Badger Removal on Herd Restrictions Due to Bovine TB in East Offaly 1989 - 2004*

**Chien-Pai Han**, Department of Mathematics, University of Texas at Arlington USA  
*Pooling Variances for Estimating Process Capability Index Cp*

**Parallel session 4-b):** 19<sup>th</sup> May, 10:55am- 12:35pm  
**Chairman:** Adrian Dunne, University College Dublin

**Finbarr O'Sullivan**, Dept. Statistics, University College Cork, Ireland  
*Reconstruction of Tissue Residue Functions from Dynamic PET Data*

**Michelle Byrtek**, Department of Mathematics, Western Washington University, USA  
*Impact of Parameter Covariance Specification on Penalized Likelihood Estimates of Kinetic Parameters from PET*

**Sophie Achard**, Brain Mapping Unit, University of Cambridge, UK  
*Long-memory characterization using wavelet correlation*

**Ben Flood** Department of Mathematics and Statistics, University of Limerick, Ireland  
*Two-Dimensional Shape Representation for Statistical Analysis*