

BREV
Ukonvolteret



MEDDELELSER

Dansk Selskab for Teoretisk Statistik

Todagesmøde i DSTS

3.- 4. November, Syddansk Universitet side 3

Ph.D forsvar

Socioeconomic determinants for fertility, Mette Gerster side 4

Seminarer

Seminar i anvendt statistik, Biostatistisk Afdeling, KU side 5
Seminar in applied mathematics and statistics, H.C. Ørsted institute, KU side 6

Workshop

Workshop on Ambit Processes, Non-Semimartingales and Applications side 7

Stillingsopslag

Statistiker til Project Management og Information, Novozymes side 8
Biostatistician – International Clinical Research, Lundbeck side 9

Nyt om Navne side 10

Returneres ved varig adresseændring

Næste nummer af "MEDDELELSER" udkommer 5. oktober 2009.
Bidrag skal være redaktøren i hænde senest den 25. september kl.

Dansk Selskab for Teoretisk Statistik Bestyrelse 2008

Formand fm@dsts.dk

Niels Richard Hansen
Afd. for Anvendt Matematik og Statistik
Københavns Universitet
Tlf: 35 32 07 83

Næstformand nfm@dsts.dk

Esben Agerbo
National Centre for Register-based Research
Faculty of Social Sciences University of
Aarhus
Tlf: 89 42 68 15

Kasserer kass@dsts.dk

Malene Højhøj
Novo Nordisk A/S
Tlf: 30 79 62 09

Sekretær sekr@dsts.dk

Marc Andersen
StatGroup ApS
Tlf: 61 77 72 48

Webmaster web@dsts.dk

Klaus Kaas Andersen
Informatics and Mathematical Modelling,
Section for Statistics, DTU
Tlf.: 45 25 34 19

Redaktør red@dsts.dk

Charlotte Hindsberger
Novo Nordisk
Tlf: 30 79 65 92

Meddelelser er medlemsblad for
Dansk Selskab for Teoretisk Statistik (DSTS),
se <http://www.dsts.dk>.

Selskabets formål er at fremme den statistiske
videnskab og dens anvendelser.

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Selskabet har en elektronisk nyhedsliste
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Udgivelsesplan for Meddelelser 2009

Nr.	Bidrag senest	Udkommer
1	23. januar	2. februar
2	20. februar	2. marts
3	27. marts	6. april
4	24. april	4. maj
5	22. maj	1. juni
6	21. august	1. september
7	25. september	5. oktober
8	23. oktober	2. november
9	20. november	1. december

Todagesmøde i Dansk Selskab for Teoretisk Statistik

3. - 4. november 2009

Syddansk Universitet

Hjemmeside: www.biostat.sdu.dk/Todagesmoede/program.html

Sted: Winsløwsparken 25, Syddansk Universitet

Tilmelding: Registrering sker ved email til myllerup@stat.sdu.dk, Forskningsenheden for Biostatistik,
SDU, **senest den 23. oktober 2009**. **Pris:** 250 kr. for studenter (excl.Ph.D. studerende) og
500 kr. for alle andre. Betaling sker til DSTS, Jyske Bank, Reg. nr. 7853, konto nr. 1117188.
Angiv venligst klart hvilke(n) personer betalingen gælder for.

Med venlig hilsen

Torben Martinussen
Professor, Forskningsenheden for Biostatistik

Tlf. 6550 3604
Fax 6550 3345
Email tmartinussen@health.sdu.dk
Adr. J.B. Winsløvs Vej 9, 5000 Odense C



SYDDANSKUNIVERSITET.DK

Mette Gerster

Department of Biostatistics, Institute of Public Health, University of Copenhagen
will defend her PhD thesis entitled

Socioeconomic determinants for fertility

Tuesday September 15, 2009 at 14.15

in room 1.1.18, CSS, University of Copenhagen, Øster Farimagsgade 5, Copenhagen.

Supervisors:

Niels Keiding (Department of Biostatistics, University of Copenhagen)

Mette Ejrnæs (Department of Economics, University of Copenhagen)

Opponents:

Esben Budtz-Jørgensen (Department of Biostatistics, University of Copenhagen)

Gerard J. van den Berg (Department of Economics, VU University Amsterdam)

Øystein Kravdal (Department of Economics, University of Oslo)

The Department of Biostatistics would like to invite you to the reception afterwards
in room 5.2.46, CSS, University of Copenhagen, Øster Farimagsgade 5, Copenhagen.

Abstract:

The effect of socioeconomic factors such as education and labour market attachment on fertility has been the subject of numerous studies in the demographic literature for many years. Over the last decades, the educational level of women as well as female labour force participation have been rising in most industrialised countries and at the same time the overall level of fertility has been declining. Therefore, it is relevant from a societal point of view, how these issues are related, both from a macro- as well as from a micro-perspective. The results presented in this talk will be based on the latter.

Traditionally, studies of fertility and its socioeconomic determinants have been concerned with separate parity transitions, i.e. how the rate of having e.g. a second child depends on either the mother's educational attainment or her current labour market attachment. The first study presented here deals with the relationship between the labour market attachment of Norwegian mothers and the intensity with which these women proceed to parity two and three. This analysis is carried out by means of a *simultaneous equations modeling approach* which has been developed in the econometric literature to handle selection problems. Such selection problems might arise due to possible unobserved characteristics which simultaneously influence the fertility process and the labour market attachment. The analysis is carried out using Norwegian register data for the period 1994-2002.

The second part of the talk presents an analysis of the effect of educational attainment and *ultimate fertility* for a cohort of Danish women born in 1963. Here, the main focus is on the possibility that *feedback mechanisms* may distort the picture and on the methodological challenges arising because of this. If, for example, women who become mothers while enrolled in university tend to deviate from their original strategy by selecting themselves into a shorter education without finishing university, it would show up as fewer children among university graduates. By employing the so-called *marginal structural models*, recently developed in the epidemiological and biostatistical literature, the data are manipulated in such a way that the feedback is *lifted out*, but the relationship of interest remains. The results from this study point to the conclusion that the feedback is an important factor in the different levels of ultimate fertility across education groups for this particular cohort of women.

Niels Keiding

Seminar i anvendt statistik

Seminaret afholdes på det gamle Kommunehospital, Øster Farimagsgade 5. Der serveres te i Biostatistisk Afdelings bibliotek (opgang B, lokale 10.2.15) en halv time før.

Mandag d. 28. September 2009, kl. 15.15, lokale 5.2.46.

Aurelien Latouche

Université Versailles St-Quentin, France

A Regression Model for the Conditional Cumulative Incidence Function

Competing risks are classically summarised by the cause-specific hazards and the cumulative incidence function. To get a full understanding of the competing risks, these quantities should be viewed simultaneously for all possible events. Another available quantity is the conditional cumulative incidence function of a competing risk, which is defined as the probability of failing from a particular cause given that no other (competing) events have occurred. When one event is of a particular interest, this quantity provides useful insights, as it displays a probability adjusted on the other competing events. In certain applications, this interpretation may be preferable to that for the cumulative incidence function in quantifying cause specific failure probabilities. The use of the conditional cumulative incidence function has been limited by the lack of regression modelling strategy. In this talk, we apply recently developed regression methodology to the conditional cumulative incidence function and illustrate using a data set on patients suffering from monoclonal gammopathy of unknown significance, the insights which can be gained using this methodology.

References:

PEPE, M.S. and MORI, M. (1993): Kaplan-Meier, Marginal or Conditional Probability Curves in Summarizing Competing Risks Failure Time Data? *Statistics in Medicine*, **12**, 737-751.
FINE, J.P., YAN, J. and KOSOROK, M.R. (2004): Temporal Process Regression. *Biometrika*, **91**, 683-703.

Thomas Gerds



SEMINAR IN APPLIED MATHEMATICS AND STATISTICS

Wednesday, September 2, 2009, 15:15, aud. 10, H.C. Ørsted Institute

Speaker: Flemming Topsøe, University of Copenhagen

Title: How to keep the expert honest or, how to insure against misinformation

Abstract:

The indicated theme goes back, among others, to Good around 1950. The development has led to scoring rules, especially proper scoring rules which are schemes intended to keep an expert honest when giving advice to a decision maker. Closely related are endeavours to insure yourself against misinformation, say from your bank advisor. Common to the solutions suggested is that the payment (fee or insurance policy) depends on what actually happened.

The results are spin-offs of a study aiming at an interpretation adequate for statistical physics of entropy measures closely related to Renyi entropy. In the context of scoring rules this provides you with rules which are of relevance in situations where statistical inference typically leads to power laws.

Friday, September 25, 2009, 14:15, aud. 10, H.C. Ørsted Institute

Speaker: Jostein Paulsen, University of Copenhagen

Title: TBA

AUGUST 21, 2009

UNIVERSITETSPARKEN 5
DK-2100 COPENHAGEN
DENMARK

<http://www.math.ku.dk/>



FOR APPLIED MATHEMATICS IN NATURAL SCIENCE

Department of Mathematical Sciences

University of Aarhus

Workshop on Ambit Processes, Non-Semimartingales and Applications

Sunday 24 January – Thursday 28 January 2010 at Sandbjerg Estate

Objectives:

The meeting will address recent developments in the theory and applications of ambit processes. The ambit processes form a general class of processes for tempo-spatial modelling, but have interesting and non-trivial aspects already in the purely temporal case.

Ambit processes are generally not of the semimartingale type, and the subject of ambit processes thereby links closely to another topic of substantial current interest, that of properties and applicability of non-semimartingales. Applications to turbulence, finance and cell growth will be discussed, with particular focus on the former area. For the study and solution of key problems in the fields concerned the newly established results on multipower variation and on central limit theory in the context of Malliavin calculus are essential, and such material will be covered in some of the survey talks.

Themes of the Meeting:

- Ambit Processes and Brownian Semistationary Processes
- Non-Semimartingale Issues
- Multipower Variation and CLT in Malliavin Calculus
- Basics and Phenomenology of the Physics of Turbulence
- Stochastic Processes Modelling of Turbulence: Temporal and Tempo-Spatial Modelling
- Turbulence and Finance
- Application of Ambit Processes in Energy Markets

Survey Talks:

- Ambit Processes, Ole E. Barndorff-Nielsen
- Multipower Variation, Mark Podolskij
- CLT in Malliavin Calculus, José-Manuel Corcuera
- Turbulence, Jürgen Schmiegel
- Ambit Processes in Energy Markets, Fred Espen Benth

Organizing Committee:

Ole E. Barndorff-Nielsen, Aarhus University, Denmark
José-Manuel Corcuera, University of Barcelona, Spain
Jürgen Schmiegel, Aarhus University, Denmark
Almut Veraart, Aarhus University, Denmark

Further information at <http://www.ambitprocesses.au.dk>

Statistikere til Project Management og Information

Vi søger en statistiker til spændende og varierende statistiske udfordringer.

Udfordringer

Du vil blive involveret i en række forskellige opgaver, hvor du kan være sikker på at få udfordret dine analytiske og statistiske kompetencer. Opgaverne spænder bredt lige fra procesoptimering i produktionen, produktudvikling og optimering, udvikling og validering af analysemetoder i laboratoriet til deltagelse i større tværorganisatoriske projekter.

Fælles for alle typer opgaver er, at de foregår i tæt samarbejde med kolleger fra andre dele af Novozymes i både Danmark og udland. Som en del af jobbet har du mulighed for at være med til at planlægge og afholde træning i relevante statistiske metoder for andre områder.

Du får et selvstændigt og udfordrende job med mulighed for at danne netværk til det meste af organisationen. Du har store muligheder for at præge jobbet og din indsats vil udmønte sig i konkrete resultater for Novozymes.

Kvalifikationer

Du har en akademisk uddannelse med speciale i anvendt statistik (BSc, MSc/PhD). Derudover har du gerne erfaring med brugen af statistik på industrielle problemstillinger og behersker værktøjskassen af statistiske metoder – herunder eksplorativ statistik, forsøgsplanlægning, SPC, mixed models, samt multivariate metoder. Du har gode samarbejdsevner, forstår at "tale statistik" med ikke-statistik kyndige og motiveres af at finde løsninger og skabe resultater i samarbejde med andre. Du kender til statistik software fx SAS og/eller JMP.

Vi har tradition for at arbejde projektorienteret, herunder med Six Sigma projektmodellen, så har du erfaring med eller lyst til at prøve kræfter med projektledelse er der store muligheder for også at udvikle dine kompetencer indenfor dette område.

Project Management & Information

Vores afdeling er en del af Quality, Environment og Safety organisationen i Novozymes. Udover dig består afdelingen af 2 statistikere og 2 projektledere. Vi har gang i en masse spændende opgaver indenfor statistik og dataanalyse, projektledelse og ledelsesrapportering. Vi er geografisk placeret i Bagsværd og har en stor berøringsflade og supporterer de fleste områder af Novozymes.

Kontakt

Hvis du vil vide mere om stillingen, kan du kontakte statistiker Birger Stjernholm Madsen på 4446 2817 eller afdelingsleder Merete Fich på 3077 3921.

Søg online via www.novozymes.com/careers, ref. nr. NZDK00264 senest den 8. september 2009.

Biostatistician – International Clinical Research

A position as biostatistician is open in the Biostatistics Department, International Clinical Research. The department works primarily within clinical research but contributes to the entire drug development process from discovery to market across the range of therapeutic areas within psychiatry and neurology. The current staffs include 22 biostatisticians (hereof 4 in Singapore and 1 in the US) and one secretary.

We offer a challenging job with broad career opportunities in a dynamic and open working atmosphere with focus on personal and scientific development and a good work-life balance.

Your job

Part of your responsibility will be to provide statistical input for designing and planning of clinical studies, to perform statistical analysis and to participate in interpretation of clinical study results in all phases of development. You participate in preparing publications, which involves exploratory statistical analyses of a diverse range of clinical study data and, where appropriate, research in new statistical methodologies. Other challenges may involve providing statistical input for clinical development plans, new study designs, statistical modelling and simulation in the area of translational medicine for optimisation of early drug development.

You work in close collaboration with clinical researchers and other specialists both within the company and with business partners worldwide, exerting your expertise in statistical methodology. Together with your fellow biostatisticians, you keep abreast of current practices in pharmaceutical R&D and state-of-the-art statistical methodology.

Your qualifications

Our preferred candidate

- holds an MSc or PhD degree in Statistics or Mathematical Sciences
- has programming experience and familiarity with statistical software
- has a strong interest in applying statistical methods to biological problems and being a part of a cross-functional working environment
- has work experience from the pharmaceutical industry or consulting experience from an industrial or academic setting
- is analytical, goal-oriented, innovative and proactive
- is fluent in oral and written English
- is a team player and able to interact with colleagues and collaborators from different functional areas and partner companies

Further information

Please contact Head of Department, Anna Karina Trap Huusom, on +45 3643 2303, Head of Section, Mette Krog Josiassen, on +45 3643 3633 or Head of Section, Karin Gembert, on +45 3643 3921. We also recommend you to visit our website www.lundbeck.com.

Your application

Please submit your application electronically at <http://www.lundbeck.com/careers> where you will find this position in the list of 'Current vacancies'. Applications must be received no later than September 14, 2009.

Nyt om navne

Susanne Ditlevsen har modtaget 5.760.000 kr. fra Det Frie Forskningsråd til et projekt med titlen "Statistical methods for stochastic models of physiological processes from data of discrete observations or first-passage times".

Tre danskere blev hædret ved Joint Statistical Meeting, Washington, 1.-6. August 2009.

- **Michael Sørensen** (Københavns Universitet) blev Fellow of the Institute of Mathematical Statistics med begrundelsen "For fundamental research on the theory of inference for stochastic processes; for incisive applied research in biology, finance, and geophysics; and for outstanding national and international research leadership".
- **Philip Hougaard** (Lundbeck) blev Fellow of the American Statistical Association med begrundelsen "For professional leadership as a biomedical scientist; for outstanding methodologic research in survival analysis, particularly in the analysis of multivariate time to event data; and for service to the profession."
- **Daniel A. Sørensen** (Aarhus Universitet) blev Fellow of the American Statistical Association med begrundelsen "For influential research in statistical genetics; for pioneering work on Bayesian and Markov chain Monte Carlo methods in animal breeding; and for excellence in international teaching of statistical genetics".

Derudover er **Michael Sørensen** blevet valgt til præsidiat for Det Kongelige Danske Videnskabernes Selskab.

Kalender 2009 - 2010

Dato	N o.	Aktivitet
2. Sep 09	6	Seminar, H.C. Ørsted Institute, Flemming Topsøe. <i>How to keep the expert honest or, how to insure against misinformation</i>
15. Sep 09	6	Ph.D forsvar, Mette Gerster, Department of Biostatistics, University of Copenhagen. <i>Socioeconomic determinants for fertility</i>
25. Sep 09	6	Seminar, H.C. Ørsted Institute, Jostein Paulsen. <i>Title TBA</i>
28. Sep 09	6	Seminar, Biostatistisk Afdeling KU, Aurelien Latouche. <i>A regression model for the Conditional Cumulative Incidence Function</i>
Oct-Nov 09	Emed	BGC-Network course OSLO: <i>SURVIVAL AND EVENT HISTORY ANALYSIS</i>
3-4. Nov 09	6	Todagesmøde i DSTS, Syddansk Universitet
24-28 Jan 10	6	Workshop, Thiele Centre, University of Aarhus. <i>Workshop on Ambit Processes, Non-Semimartingales and Applications</i>