

Meddelelser v/Morten Frydenberg
Institut for Biostatistik
Aarhus Universitet

BREV
Ukonvoluteret

PP
Danmark

Returneres ved varig adresseændring

Næste nummer af "MEDDELELSER" udkommer 3. maj 1999.

Bidrag til dette nummer skal være redaktøren i hænde senest
fredag den 23. april 1999.

Bidrag bedes sendt til:

Meddelelser, v/Morten Frydenberg
Institut for Biostatistik
Vennelyst Boulevard 6
8000 Århus C.
eller med e-mail til: morten@biostat.au.dk

Samme adresse bedes benyttet ved **indmeldelse** i DSTS og ved **adresseændring**.

Bidrag i elektronisk form ønskes helst i et af nedenstående formater: Word, LATEX, HTML, Postscript eller ASCII.

Annoncering af stillinger er kr. 500 pr. side

MEDDELELSER

Dansk Selskab for Teoretisk Statistik

Halvdags møde om

Measurement errors in regression models

Onsdag den 14. april kl. 13.00-16.30

Teilum-building, Auditorium A

Frederik V's vej 11 København Ø

Arrangeret i samarbejde med Dansk Epidemiologisk Selskab
(Se program inde i bladet)

Todagesmøde i selskabet

4. – 5. Maj

Odense

(se program inde i bladet)

Deltagergebyr: 400 kr. for "voksne" (inkl. ph.d.-studerende). 200 kr. for studerende.

Beløbet indbetales på DSTS's girokonto 318-8418, MED TYDELIG ANGIVELSE
AF HVEM DET VEDRØRER.

Tilmelding til kassereren, Ernst Hansen, E-mail: erhansen@math.ku.dk,
Tlf: 35320773, **allersenest torsdag d. 29. april.**

Arrangeret af Institut for Statistik og Demografi, Syddansk Universitet.
Mødet foregår i auditorium U1, SDU-Odense Universitet, Campusvej 55,
5230 Odense M.

Ret til ændringer forbeholdes; se også
<http://www.ou.dk/TVF/StatDem/DSTSmeeting.html>
for sidste nyt, samt praktiske oplysninger.

Selskabets bestyrelse:

Formand: Peter Dalgaard Biostatistisk Afdeling Panum Institutet Blegdamsvej 3 2200 København N	Tlf: 3532 7918 Fax: 3532 7907 e-mail: p.dalgaard@biostat.ku.dk
Kasserer Ernst Hansen Afdeling for Teoretisk Statistik Københavns Universitet Universitetsparken 5 2100 København Ø	Tlf: 3532 0773 Fax: 3532 0772 e-mail: erhansen@math.ku.dk
Redaktør: Morten Frydenberg Institut for Biostatistik Aarhus Universitet Vennelyst Boulevard 6 8000 Århus C	Tlf: 8942 6130 Fax: 8942 6140 e-mail: morten@biostat.au.dk
Sekretær: Helle Andersen NOVO Krogshøjvej 53 2880 Bagsværd	Tlf: 4442 1957 Fax: 4442 1065 e-mail: hand@novo.dk
Jyske anliggender: Bjarne Højgaard Institut for Elektroniske Systemer Aalborg Universitet Frederik Bajersvej 7 9200 Aalborg Øst	Tlf: 9635 8080 9635 8927 (direkte) Fax: 9815 8129 e-mail: malik@math.auc.dk
Webmaster: Henrik Stryhn Statens Veterinære Serumlaboratorium Bülowsvej 27 1790 København V	Tlf: 3530 0237 Fax: 3530 0120 e-mail: hes@svs.dk

Selskabets www-adresse: [Http://www.dsts.dk](http://www.dsts.dk).

Generiske e-mail-adresser i selskabet:

Formand: fmd, formand, chair, chairman
Redaktør: red, redaktoer, edit, editor
Jyske anliggender: jysk, jyskeanl, jutland
Indkøb: indk, indkoeber, suppl, supplier
Meddelelser: medd, meddelseler, newsl, newsletter
Bestyrelsen: best, bestyr, bestyrelse, board

Hvis man f.eks. skal skrive til formanden, så kan man bruge adressen: fmd@dsts.dk.

Referat fra generalforsamlingen i DSTS d. 23. februar 1999.

1) Valg af dirigent

Niels Keiding blev valgt til dirigent.

2) Bestyrelsens beretning for 1998.

Formanden Peter Dalgård fremlagde bestyrelsens beretning for 1998, som blev godkendt. Beretningen kan læses i februar nummeret af Meddelelser.

3) Regnskabet for 1998.

Bestyrelsens kasserer Ernst Hansen fremlagde og gennemgik regnskabet for 1998. Regnskabet viste et overraskende overskud, der til dels skyldes en revision af udsendelsen af Meddelelser samt et overskud fra afholdelse af Nordisk konference. Regnskabet blev godkendt og kan ses i selskabets arkiv.

4 Valg af bestyrelsesmedlemmer.

Peter Allerup, Susanne Christensen og Morten Frydenberg var på valg. De to førstnævnte har siddet i bestyrelsen i to perioder og kunne derfor ikke genvælges. Bestyrelsen havde foreslået Henrik Stryhn og Bjarne Højgaard som begge blev valgt ind. Desuden blev Morten Frydenberg genvalgt.

5. Valg af revisor.

Kirsten Frederiksen blev genvalgt som revisor.

6. Behandling af indsendte forslag.

Ingen.

7. Fastsættelse af næste års kontingent.

Bestyrelsen foreslog uændret kontingent på 250 kr. samt 125 kr. for studerende. Forslaget blev vedtaget og desuden blev det besluttet, at pensionister kan betale det samme som studerende, hvis de selv gør opmærksom på, at de er blevet pensioneret.

8. Evt.

Bestyrelsen blev spurgt om, hvad de ville bruge budget-overskudet til. Formanden foreslog at pengene kunne bruges til at invitere flere folk fra udlandet til at tale ved aftenmøder samt at den gruppe der er nedsat til at se på statistik undervisningen i gymnasiet, kunne for betalt visse af deres omkostninger (f.eks. rejseomkostninger).

Bestyrelsen har siden konstitueret sig som følger:

Peter Dalgaard: Formand
 Ernst Hansen: Kasserer
 Helle Andersen: Sekretær
 Bjarne Højgaard: Jyske anliggender
 Henrik Stryhn: Webmaster

Dansk Selskab for Teoretisk Statistik
Regnskab for 1998

Indtægter

Kontingent:			
Ordinære medlemmer 98	312 á 250	78.000,00	
Studerter medlemmer 98	43 á 125	5375,00	
Æresmedlemmer 98	2 á 0	0,00	
Uregelmæssige kontingent 98		2040,00	
Kontingent 97	3 á 250	<u>750,00</u>	86.165,00
Renter			188,80
Abonnementsindbetaling SJS:			
Abonnement 99	42 á 160	6720,00	
Abonnement 98	1 á 160	<u>160,00</u>	6.880,00
Annoncer, MEDDELELSER			10.500,00
Nordisk møde:			
Afregning ICS		12.137,79	
Kontant indtægt		3.900,00	
Sponsorstøtte, NOVO,		<u>20.000,00</u>	36.037,79
Todagesmøde, november 98:			
Ordinære deltagere	71 á 400	28400,00	
Studerter deltagere	23 á 200	4600,00	
Foredragsholdere	5 á 0	<u>0,00</u>	33.000,00
Indtægter ialt:			<u>172.771,59</u>

Dansk Selskab for Teoretisk Statistik
Regnskab for 1998
(fortsat)

Udgifter

MEDDELELSER			
Trykning		14.150,01	
Porto		21.307,50	
Kuverter		<u>312,50</u>	35.770,01
Administration(gebyrer etc.)			1.478,68
Internationalt (ISI)			490,82
Aftenmøder			5.523,00
Bestyrelsesmøder			1.609,00
WWW-server			1.593,75
SJS-abonnement 98			4.800,00
Todagesmøde, november 98			40.727,50
Nordisk møde:			
Studertermedhjælp		450,00	
Porto		<u>4.120,00</u>	4.570,00
Uregelmæssig kontingent			20,00
Afskrevet			<u>243,75</u>
Udgifter ialt:			<u>96.826,51</u>
Kontant overskud:			<u>75.945,08</u>

Dansk Selskab for Teoretisk Statistik
Regnskab for 1998
(fortsat)

Status


Beholdning 31. dec. 1997	43.688,13
Overskud 1998	75.945,08


Beholdning 31. dec. 1998	<u>119.633,21</u>
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Beholdningens placering

Girokonto	101.728,42	
Tilgodehavende:		
Annoncer	2.500,00	
Nordisk møde, afregning ICS	12.137,79	
Nordisk møde, kontant	3.900,00	
Todagesmøde, november	<u>1.200,00</u>	19.737,79
Udestående:		
Bestyrelsesmøde	737,00	
Todagesmøde, november	586,00	
Studentermedhjælp, nordisk møde	450,00	
Porto, MEDDELELSER	<u>60,00</u>	<u>1833,00</u>
		<u>119.633,21</u>

22. februar 1999


Ernst Hansen
Kasserer


Kirsten Frederiksen
Revisor

Todagesmøde 4.-5. maj

Program:

Tirsdag d. 4 maj, auditorium U1

- 13.15-14.30 Gordon Smyth, University of Queensland, visiting SDU-Odense University:
Accounting for Dispersion in Count Data: Semi-Parametric Extended Poisson Process Models
(Joint work with Heather M. Podlich, University of Queensland and Malcolm J. Faddy, University of Canterbury)

Count data frequently exhibit departures from standard Poisson or binomial models. In generalized linear modelling, the observed variances are often larger or smaller than that implied by the assumed Poisson or binomial distributions. Many alternative models and generalizations have been proposed, including random effects and mixture models, quasi-likelihoods and variance function estimation. Extended Poisson models are a new class of models that allow a more general approach to modelling count data than any of these existing methods. They involve representing a discrete distribution as the number of events to occur in a finite time interval of a state-dependent Markov birth process. It is the nature of the state-dependency which determines the dispersion properties of the model constructed. In this talk we use non-parametric smoothing of the state-dependence profile to allow the data to determine the nature of the dispersion.

- 14.30-15.00 Kaffe

- 15.00-16.15 Lars Korsholm, Centre for Analytical Finance, University of Aarhus:
Recent developments in semiparametric models

Semiparametric models are infinite-dimensional models with (typical) finite-dimensional Euclidean interest parameters. A well-known example is the Cox-regression model. However, the beautiful treatment through Cox's partial likelihood is not possible in general.

The talk will consist of two parts. First we survey and introduce the general theory for asymptotic inference in these models. We emphasize the agenda and the main results in the literature, recent developments with respect to maximum likelihood estimation, and the connection to the theory of finite-dimensional parametric models.

In the second and longest part of this talk we take the general theory and apply it to three different models. The first model is frequently used in econometrics and is called the conditional moment model. (A typical observation (Y, X) satisfies $E[m(Y, X; \theta) | X] = 0$ a.s. for some value of θ and a known function m .) Traditionally, ad hoc moment methods have been applied, but we will demonstrate how a methodological approach based on the first part of the talk can be used. The second model is a normal mixture model, where we mix over a parameter present in both the conditional mean and the conditional variance. We obtain an efficient estimator

despite some complications. The model extends the generalized hyperbolic distribution which recently has been applied successfully to financial data. The last model is the correlated gamma frailty model, which extends the Cox regression by multiplying the conditional hazard density by an unobserved gamma-distributed random variable. Here we apply a result for the maximum likelihood method in semiparametric models to prove the validity of the likelihood ratio test for the Euclidean parameters.

16.15-16.30 Pause

16.30-17.45 *Bertrand Clarke*, University of British Columbia:
Model Selection and Uncertainty in Online Prediction

In this presentation we discuss a technique for making predictions from different models at different times, where the models are chosen by different model selection principles (MSP's) in a prequential setting. This is not the same as Bayesian model averaging, although the two may be complementary. Our procedure assumes different MSP's represent physically different assumptions and so correspond to 'catchment areas' of models on which one MSP or another performs best. We show that our strategy does no worse asymptotically than a strategy which uses the same MSP all the time.

In addition to choosing MSP's sequentially, our procedure may permit us to omit some data. This adaptability permits us to consider nonstationary settings; however, we conjecture that in cases of substantial model misspecification (especially involving dependence) neglecting early data will be optimal.

18.30-19.30 Besøg på Institut for Statistik og Demografi, Hestehaven 201

19.30-24.00 Middag i Odense Golfklub, Hestehaven 200

Onsdag d. 5. maj, auditorium U1

9.30-10.45 *Ludwig Fahrmeier*, University of Munich:
Bayesian Inference for Generalized Additive Regression Based on State Space Models
(joint work with Stefan Lang, Munich)

In the talk, I present a general approach for Bayesian inference via Markov chain Monte Carlo (MCMC) simulation in generalized additive, semiparametric and mixed models. It is particularly appropriate for discrete and other fundamentally non-Gaussian responses in cross-sectional, longitudinal or spatial data situations. The approach uses the close relation between nonparametric regression and dynamic or state space models to develop posterior sampling procedures that are based on recent Metropolis-Hasting algorithms for dynamic generalized linear models. The methods are illustrated with an application to space-time data on unemployment durations.

10.45-11.15 Kaffe

11.15-12.30 *Xiao-Li Meng*, University of Chicago:
Improving Perfect Simulation: Multi-stage Backward Coupling and Parallel Antithetic Coupling

Initiated by the seminal work of Propp and Wilson (1996), a new class of MCMC algorithms has emerged. This class of algorithms has been labeled perfect simulation or exact simulation because, for this class of stochastic iterative algorithms, the challenging issue of accessing convergence as well as errors in approximation completely vanishes. In this paper we propose the methods of multi-stage backward coupling and of parallel antithetic coupling to expand the Propp and Wilson's framework of backward coupling. The first method borrows ideas from survey sampling where it is a common knowledge that multi-stage sampling is typically more cost effective than single-stage sampling. The second method explores the use of antithetic variates with backward coupling, and it relies critically on the theory of negative association, which studies the preservation of negative correlation under monotone transformations. Limited empirical and theoretical evidence suggests the possibility of significant improvement (e.g., 30%-50% reduction in time/variance) with either method over the Propp-Wilson algorithm in certain applications.

This is joint work with Radu Craiu.

12.30-14.00 Frokost i kantinen

14.00-15.15 *Birgitte Rønn*, the Royal Veterinary and Agricultural University, Frederiksberg:
Non-Parametric Maximum Likelihood Estimation for Time-Transformed Curves

Analysis of a sample of curves can be done by Self Modelling Regression methods. Within this framework we follow the ideas of Non Parametric Maximum Likelihood Estimation known from event history analysis and the counting process set-up. We derive an infinite-dimensional Score equation and from here we suggest an algorithm to estimate the shape function for a simple shape invariant model for randomly time-transformed curves. The Non-Parametric Maximum Likelihood Estimator (NPMLE) we find turns out to be a Nadaraya-Watson-like estimator, but the kernel and the smoothing parameter are chosen by the posterior distribution of the time-transformation parameters given data. The methods is applied on a sample of chromatographic spectra of the protein profile of crop.

Half-day meeting
Measurement errors in regression models
Wednesday, April 14th, 1999

13.00 - 14.15 *Sarah Darby*, ICRF Cancer Epidemiology Unit, University of Oxford

**Models for measurement error in explanatory variables with a
application to a case-control study of residential radon**

In order to provide a method for the analysis of lung cancer risk following residential radon exposure a simple but general form of measurement error model for explanatory variables was developed. The model incorporates classical and Berkson cases as particular forms, and allows for additive or multiplicative errors. The possibility that different individuals in a study have errors of different types and of different magnitudes is also considered. The relatively simple estimation procedures proposed for use with cohort data and case-control data were checked by simulation, under the assumption of various error structures. The results showed that even in situations where conventional analysis yielded slope estimates that were on average attenuated by a factor of approximately 50 per cent, estimates obtained using the proposed amended likelihood functions were within 5 per cent of their true values. The model should be applicable to a wide variety of situations.

14.15 - 14.45 Coffee

14.45 - 15.30 *Esben Budtz-Jørgensen*, Department of Biostatistics, Institute of Public Health, University of Copenhagen

Errors in measurements of mercury exposure biomarkers

In measuring environmental risk factors measurement error is a common problem. Typically the measurement errors are not only caused by laboratory and device error but are also a result of biological variation of the exposure measurement around the "true" exposure variable. As a consequence of the exposure measurement error multiple regression inference both about the effect of the exposure and the effect of possible confounders may be misleading.

In this talk I will discuss estimation of the measurement error variances and the biases introduced by the measurement errors in data collected by P. Grandjean to investigate the effect of prenatal mercury exposure on a child's cognitive function.

15.30 - 16.15 *Per Kragh Andersen & Knut Liestøl*, Department of Biostatistics, Institute of Public Health, University of Copenhagen, Department of Informatics, University of Oslo

Measurement errors of updated covariates in survival analysis

The effect of measurement errors in covariates in the Cox regression model with time-fixed covariates was discussed by Prentice (Biometrika, 1982). We briefly review these results and extend the discussion to the situation where updated recordings of a time-dependent covariate are available. Here, both measurement errors and ageing of the available covariate values play a role and we illustrate these effects using both real and simulated data. Finally, methods for adjusting for these effects in the analysis are discussed

16.15 - 16.30 Discussion

SEMINAR I ANVENDT STATISTIK

Københavns Universitet, Biostatistisk Afdeling

Panum Institutttet, Blegdamsvej 3. (Indgangen Nørre Alle 20 kan også benyttes)

Der serveres te i Biostatistisk Afdeling på gangarealet (33.4.11) ½ time før seminaret

Torsdag den 29. april, kl. 14.15 i lokale 21.1.24:

Terry Therneau, Section of Biostatistics, Mayo Clinic, Rochester, Minnesota

Penalized Survival Models, Frailty, and Practicality or I have this nice new hammer - is there a nail in sight?

A recent addition to the S-Plus survival analysis functions for both parametric and proportional hazards regression models is the ability to include an arbitrary penalization function on some subset of the coefficients. For instance, a set of B-spline basis functions along with the appropriate quadratic penalty $\beta' H \beta$ allows for smoothing splines to be used in the models.

More interesting is that various random effects (frailty) models can be formulated in this way. Thus, the software allows one to easily fit several recently proposed models:

- per institution rates, shrunk towards a common mean. This is recommended in the context of "hospital profiling" by Christianson and Morris, 1995.
- per family random effects, adjusting for an unmeasured genetic component
- correlated outcomes per subject, such as multiple infections

I will show how each of these can be fit using the new software. However, several issues arise of which the most severe is that estimates of the variance of the random effect are very unstable for moderate n (i.e., the sample sizes in my studies). The connection to penalized models gives some insight, but the best strategy is still unclear.

Mandag d. 10. maj, kl. 15.15 i lokale 21.2.27b:

Philip Hougaard, Novo Nordisk

Analysis of multivariate survival data by marginal modeling.

Marginal modeling is a two-stage approach that determines the effect of covariates on survival time, including an estimate of the variability. There are two versions of the approach. The coordinatewise approach studies the effect of all covariates based on each coordinate separately in the first stage. The second stage evaluates an estimate of the covariance matrix and combines the separate estimates by means of the (inverse) covariance. The independence working model approach finds a single estimate of the regression coefficients using all data in the first stage, ignoring dependencies. The second stage consists of finding a suitable estimate of the variability. I will discuss the advantages and disadvantages of these approaches, and illustrate them by means of several examples of multivariate survival data

Mandag den 17. maj, kl. 15.15 i lokale 21.1.24:

David Matthews (University of Waterloo, Ontario)

Statistical Quality Control of HIV-1 ELISA Testing

In view of the millions of enzyme-linked immunosorbent assays (ELISAs) for HIV-1 which are performed each year in routine laboratory situations, the problem of ensuring the quality and effectiveness of each test is an important one for laboratory management and personnel. Because statistical methods are routinely used to solve similar problems in industrial settings, we undertook an examination of the merits of this approach to the quality control of routine ELISA testing for HIV-1, using data furnished by the Virology Laboratory of the Ontario Ministry of Health. As we report, the results of these investigations were both satisfying and disturbing.

**Department of Theoretical Statistics
 University of Aarhus**

Torsdag den 27. maj, kl. 14.15 i H2.28

ERNST HANSEN, Department of Theoretical Statistics, University of Copenhagen :

GEOMETRIC ERGODICITY OF METROPOLIS ALGORITHMS

(Joint work with Søren Fiig Jarner, Lancaster University)

Markov Chain Monte Carlo methods form a broad class of techniques for evaluating integrals through simulation. If an integral with respect to a probability measure P (referred to as the target measure) is desired, the idea is to construct a Markov chain with P as invariant distribution.

There are many sophisticated techniques for doing this, but most of these techniques will only apply to a restricted class of problems. The Metropolis algorithm, based on a random walk, is on the other hand a general purpose technique, and can be considered as the backbone of the entire MCMC business: it is extremely simple to implement, and it will "always work". So it is a natural choice, when the sophisticated machinery does not apply.

But even though the Metropolis algorithm will "always work", it will not always "perform well". These differences can be formalized through various notions of ergodicity. In particular emphasis is put on geometric ergodicity. Partly because it gives fast convergence of the chain. But even more so, because it gives intrinsic error-bounds on the estimated integrals.

For the Metropolis algorithm to be geometrically ergodic, the target density must have exponentially light tails. But more subtle obstacles have been discovered in higher dimension by Roberts Tweedie (1996). These obstacles relate to the geometry of the foliation of space in level manifolds of the target density.

In this talk we will give new necessary and sufficient conditions for geometric ergodicity of the Metropolis algorithm, and we will to a large extent clarify the mysteries of the Roberts/Tweedie phenomena. In particular, we will give easily checked practical conditions, which are usually satisfied.

Organizer: Jens Ledet Jensen

**Workshop on
 Computational Stochastics**

Monday January 17 — Saturday January 22, 2000

University of Aarhus

Computational stochastics is a new and expanding area of stochastics, dealing with computational methods of analyzing complex mathematical and statistical models. The workshop intends to reveal and discuss the potential strength and impact of this new discipline in a variety of applications. It is held at the Department of Mathematical Sciences, University of Aarhus, and organized by StocLab (Laboratory for Computational Stochastics) and MaPhySto (Centre for Mathematical Physics and Stochastics), University of Aarhus. The organizing committee consists of Søren Asmussen (Lund) and Eva B. Vedel Jensen (Aarhus).

The keynote addresses will contain a fair amount of tutorial material. The tentative list of speakers is as follows:

- Adrian Baddeley (Perth) *Conditional simulation*
- Peter Donnelly (Oxford) *Computational inference in genetics*
- Ian Dryden (Leeds) *Stochastic deformation*
- Peter Glynn (Stanford) *Simulation methodology in applied probability*
- Ole Mouritsen (DTU, Copenhagen) *The third science
— the computer experiment*
- William Stewart (Raleigh, NC) *Numerical methods for Markov chains*

Further invited speakers include Rudolf Grübel (Hannover), Jotun Hein (Aarhus), Anders Krogh (DTU, Copenhagen) and Neil Shephard (Nuffield College, Oxford; unconfirmed).

Contributed papers should be submitted (to the address below) before **October 1, 1999**. Due to time- and space constraints, papers for presentation will be selected by the organizers. Other papers can be presented at poster sessions.

Regularly updated information about the Workshop can be obtained from the web-page

www.maphysto.dk/events/CompStoc2000/

from where you also can register and find travel information. The registration fee is DKK500 (approx. \$75).

Computers in Science

- an interdisciplinary seminar arranged by DAIMI and Laboratory for Computational Stochastics, University of Aarhus

Steffen Lauritzen, Institut for Elektroniske systemer, Aalborg Universitet

On the estimation of structure

Traditional statistical theory is primarily concerned with estimation of real-valued parameters and possibly of testing specific hypotheses about these. An important phase of any statistical investigation involves establishing a statistical model, which identifies the framework for the discussion of issues of inference.

However, the advent of modern high-speed computers makes it possible to literally analyse thousands or even millions of different statistical models for a given problem. This calls for the need of theories that convincingly discusses the statistical issues of "model selection" procedures or "model uncertainty".

In connection with the analysis of graphical models, the above aspect could readily be called "estimation of structure". In the lecture I will give some examples of structure estimation procedures and their properties. There is still a long way to go before an acceptable theoretical discussion of the aspect can be made.

Time : Wednesday 14 April 1999, from 15.00 to 17.00

Place: Aud. D4, Department of Mathematical Sciences, Building 531

Host : Peter Møller-Nielsen

Tea, coffee and cookies will be served.

Statistiker Seniorforsker/forsker

Dansk Zoonosecenter ved Statens Veterinære Serumlaboratorium søger en statistiker snarest. Stillingen ønskes besat med en ansøger med uddannelse som cand.scient. (statistik), cand.stat. eller med dokumenterede faglige kvalifikationer i statistik og/eller epidemiologi gennem relevant uddannelse.

Såfremt den foretrukne ansøger ikke kan ansættes som seniorforsker, kan stillingen besættes på vilkår som forsker. Ansættelse som forsker er tidsbegrænset til 4 år.

Ansøgeren skal tilkendegive, om man søger stillingen som seniorforsker og/eller forsker.

For at søge stillingen er det nødvendigt, at ansøgeren rekvirerer det komplette stillingsopslag, hvori indhold, kvalifikationskrav og krav til ansøgningen er beskrevet. Stillingsopslaget kan rekvireres enten fra SVS' Internet side: www.svs.dk eller ved henvendelse til SVS' personalekontor (tlf. 35 30 01 31).

Yderligere oplysninger om stillingen kan fås ved henvendelse til zoonosekonsulent Henrik C. Wegener, tlf. 35 30 01 54 eller seniorforsker Flemming Bager, tlf. 35 30 01 52.

Ansøgning, der bedes mærket j.nr. 3142-0018, vedlægges udførlig levnedsbeskrivelse og bilag og indsendes til

Statens Veterinære Serumlaboratorium
Bülowsvej 27, 1790 København V.

Ansøgningen må være Serumlaboratoriet i hænde senest den 20. april 1999 kl. 12.00.

Statens Veterinære Serumlaboratorium (SVS) er en sektorforskningsinstitution under Ministeriet for Fødevarer, Landbrug og Fiskeri. SVS udfører diagnostik og forskning vedrørende husdyrsygdomme og zoonoser. Læs mere om SVS på Internettet: www.svs.dk, hvor denne og andre ledige stillinger opslås.



Institut for Matematiske Fag

Lektorstilling ved Afdeling for Teoretisk Statistik

Ved Afdeling for Teoretisk Statistik er en stilling som lektor ledig til besættelse efterår 1999.

Stillingen opslås med henblik på forskning og undervisning i sandsynlighedsregning og teoretisk statistik. Ansøgere må være kvalificerede til at deltage i forskning og undervisning i begge disse fag. Undervisningen omfatter såvel indledende som videregående kurser samt specialevejledning.

Ansættelse og aflønning iht. overenskomsten mellem Finansministeriet og AC om akademikere i staten. Udover den anciennitetsbestemte løn ydes et årligt tillæg på p.t. 67.560,75 kr.

Hvis ansøgeren ikke har undervisningserfaring gennem ansættelse som adjunkt eller har

opnået tilsvarende undervisningserfaring, sker ansættelse på prøve i indtil 1½ år.

Yderligere oplysninger vedrørende stillingen kan fås ved henvendelse til Hans Brøns, Afdeling for Teoretisk Statistik, Universitetsparken 5, 2100 København Ø. Tlf.nr. 35 32 07 78, e-mail hbrons@stat.ku.dk

Ansøgningsfrist mandag d. 3. maj 1999, kl. 12.00

Dette opslag er et uddrag, der ikke kan benyttes som grundlag for ansøgning. Det fulde stillingsopslag findes på internetadressen <http://www.ku.dk/pers/stilling/ac-vip/nat-osigt.html> eller skal rekvireres på Personalekontoret tlf. 35 32 26 45.

STATISTIKER

Til Center for Epidemiologisk Grundforskning søges en statistiker til ansættelse pr. 1. april 1999 eller snarest derefter. Centret udfører internationalt orienteret forskning inden for årsagssagende epidemiologi.

Jobbet

- Ansvar for analyser af data fra nye store kohortestudier.
- Deltage i afdelingens øvrige projekter i et team af læger og andre statistikere.

Kvalifikationer

- Statistisk kandidatgrad eller tilsvarende.
- Interesse for biostatistik og epidemiologisk metode.
- Gerne kendskab til databasebehandling og/eller registerforskning.
- Edb-kundskaber, gerne med kendskab til SAS.
- Tidligere erfaring fra forskningsprojekter en fordel.
- Evne til at arbejde selvstændigt.

Løn- og ansættelsesvilkår

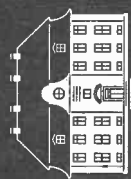
Overenskomst mellem pågældende forhandlingsberettigede organisation og Finansministeriet.

Information

Kan fås ved henvendelse til afdelingschef Mads Melbye, tlf. 32 68 31 63.

Ansøgning

Skal være Personaleafdelingen i hænde senest torsdag den 15. april 1999. Ansættelsessamtaler forventes afholdt i uge 15/16.



STATENS SERUM INSTITUT

forsøg og bekæmpelse af smitsomme sygdomme og medfødte lidelser.

Instituttet er en forskende laboratorie, medicinsk og rådgivningsinstitution, der producerer diagnostik, diagnostika, vacciner og blodprodukter til det danske sundhedsvæsen og eksport. Instituttet har over 1.000 medarbejdere og omsætter for mere end 600 mio. kr. om året.

Yderligere oplysninger om instituttet, besøg vores hjemmeside på internet på adressen www.ssi.dk.

Statens Serum Institut
Artillerivej 5
2300 København S
Tel.: 3268 3268
Fax: 3268 3868
E-mail: serum@ssi.dk
Hjemmeside: www.ssi.dk

Biostatistikere

Ved Institut for Folkesundhedsvidenskab, Københavns Universitet er en heltidsstilling som forskningsadjunkt/lektor i biostatistik for 3 år med mulighed for forlængelse ledig til tiltrædelse snarest.

Forskningsadjunkten/lektoren skal indgå i almen-medicinske forskningsprojekter, som afvikles i samarbejde mellem Afdeling for Almen Medicin, Central Forsknings-enhed for Almen Praksis og Biostatistisk Afdeling, herunder gennemføre den nødvendige statistiske metodeudvikling. Halvdelen af arbejdstiden afsættes til projektet "Diabetesomsorg i almen praksis".

Ansættelse forudsætter forskningsmæssige kvalifikationer som i den ordinære stillingsstruktur, dvs. for forskningsadjunkt videnskabelige kvalifikationer som ph.d. eller tilsvarende.

Ansøgninger til stillingen vil blive forelagt et fagkyndigt bedømmelsesudvalg. Den enkelte ansøger vil få tilsendt den del af bedømmelsesudvalgets indstilling, der vedrører den pågældende. Løn og pension i.h.t. overenskomst mellem AC og Staten.

Ansøgning fremsendes til

Professor Niels Keiding, Biostatistisk Afdeling, Københavns Universitet, Blegdamsvej 3, 2200 København N, senest 19. april 1999 kl. 12.00.

Nærmere oplysninger kan gives af Niels Keiding, Biostatistisk Afdeling, tlf. 35 32 79 03, professor Hanne Hollnagel, Afdeling for Almen Medicin, tlf. 35 32 79 41 eller seniorforsker Niels Olivarius, Central Forskningsenhed for Almen Praksis, tlf. 35 37 31 00.

Statistical Issues in Biopharmaceutical Environments

Towards the New Millennium

28- 30 July 1999

De Montfort University
Leicester , England.

Conference themes

- Regulatory and Statistical Issues in Drug Development
- Impact of International Guidelines
- Data Monitoring Committees
- Categorical Data and Repeated Measures
- Current Issues - Exact Methods, Bioequivalence, Sample Size Re-estimation

Summary of programme

Wednesday 28th

A. Agresti	<i>Small sample exact analysis of categorical data: Recent advances and continuing controversies.</i>
J. Lewis and B. Louv	<i>Impact of international Guidelines.</i>
G. Koch	<i>Nonparametrics analysis of covariance.</i>
J. Röhmel	<i>Statistical investigation on FDA & CPMP guidance to demonstrate non-inferiority anti-bacterial drugs.</i>
M. Becker	<i>Imputation strategies for analysis of incomplete longitudinal data.</i>
L. LaVange	<i>Applying sample survey methods to clinical trials using SUDAAN.</i>
C. Metha	<i>Exact Monte Carlo methods.</i>

Thursday 29th

S. Ellenberg	<i>Issues surrounding independent data monitoring committees.</i>
L. Gould & J. Denne	<i>Sample size re-estimation.</i>
A. Grive	<i>The future of Bayesian statistics in the pharmaceutical industry</i>
J. Lindsey & B. Jones	<i>Modelling Pharmacokinetic data.</i>
S. Ruberg, R. Marks and M. Burgess	<i>Impact of new technologies on Biometrics and Data Management.</i>
P. Armitage	<i>Theory and practice in medical statistics.</i>

Friday 30th

G. Enas	<i>Enhancing the value delivered by the statistician throughout clinical drug development.</i>
K. Facey	<i>Integrating statistical expertise into regulatory submissions.</i>
Y. Ohashi	<i>Design of early phase cancer trials.</i>
T. Satao	<i>Randomisation-based estimation of treatment effects.</i>
S. Senn	<i>Statistical issues in bioequivalence.</i>

Committees

Scientific programme: Chairman Prof. Byron Jones
Local organising: Byron Jones, Derek Teather, Briony A. Teather

For additional information and registration contact.

Questions of scientific / technical nature

Prof. Byron Jones Fax +44 (0) 116 250 6114 , E-mail bj@dmu.ac.uk

Conference Registration Form and administrative questions:

Dr. Briony Teather Fax +44 (0) 116 250 6114 , E-mail bte@dmu.ac.uk

**NORFA course in
SURVIVAL AND EVENT HISTORY ANALYSIS**

October 4 - 8, 1999
Department of Biostatistics
University of Copenhagen

The course is primarily intended for Ph.D. students in biostatistics from the Nordic countries, but it is also open for others interested. It will be based on the monograph "Statistical Models Based on Counting Processes" by Andersen, Borgan, Gill and Keiding (Springer-Verlag 1993).

The purpose of the course is to give an introduction to the topic emphasising statistical modeling and applications (and de-emphasising the more mathematical aspects). The course will include lectures by P.K.Andersen, Ø.Borgan and N.Keiding and exercises (some of which will be computer-based using the SAS software).

The topics during the teaching week include:

1. introductory examples,
2. heuristic introduction to the mathematical framework (counting processes, intensities, martingales),
3. non-parametric estimation (Nelson-Aalen-, Kaplan-Meier-, and Aalen-Johansen-estimators),
4. non-parametric tests (e.g., the logrank test),
5. parametric models and regression models (Cox regression, Poisson regression, Aalen's additive model),
6. time-dependent covariates and goodness-of-fit methods.

Before the start of the course participants are expected to familiarize themselves with the basic concepts used in statistical analysis of survival data. A reading list will be provided. Attending the teaching week and subsequently successfully completing an independent written course project will correspond to 3 weeks of full time graduate study.

The course contributes to the effort by the NorFa Nordic Network to provide graduate level teaching for Ph.D. students in Biostatistics. There is no course fee, but each participant has to arrange for his/her own travel and accomodation. Participants from Finland, Sweden, Norway and Iceland can apply to NorFa for funding (cf. information below and also www.norfa.no).

Applications for participation should be sent no later than May 5 to:

Per Kragh Andersen, Department of Biostatistics, University of Copenhagen, Blegdamsvej 3,
DK 2200 Copenhagen N, Denmark. (Fax: +45 35327907, e-mail: pka@biostat.ku.dk)

The number of participants in the computer sessions will be limited due to the available facilities. In case of over-booking preference will be given to Ph.d. students in biostatistics from the Nordic countries. When appropriate, please, include in the application documentation of Ph.d. student status, including topic of research and name of supervisor. Notification of acceptance to the course will be given by the end of May. For Nordic Ph.D. students the acceptance will include a reference to the Norfa Nordic Network in order to facilitate the application for NorFa travel support.

NORDISKT DELTAGANDE I NATIONELLA FORSKARUTBILDNINGSKURSER

Ansökningar (som behandlas fortlöpande) sänds till:

NorFA - Nordisk forskarutdanningsakademi

(Nordic Academy for Advanced Study)

Nedre Vollgate 8

N-0158 Oslo

Telefon: + 47 22 82 86 20

ALLMÄNT: Många forskarutbildningskurser är unika i Norden och det kan således vara av mycket stor vikt för en enskild forskarstuderande att få delta i en kurs som inte ges i hemlandet. Att öppna de nationella kurserna för forskarstuderande från det övriga Norden medför också ett effektivare utnyttjande av forskarutbildningens kapacitet och av de nationella resurserna. Dessutom kan en kursdeltagare med en annorlunda bakgrund positivt påverka kursens form och innehåll.

UPPLÄGGNING: Stöd till nordiskt deltagande i nationella forskarutbildningskurser förutsätter att kursen ges på heltid under en kortare period. Kurser som ges under en termin med några få veckotimmar är inte aktuella i detta sammanhang. Kursdeltagare från de övriga nordiska länderna kan söka om stöd till eget deltagande i nationella forskarutbildningskurser. Medel beviljas endast till resor och uppehälle. Maximal ersättning för uppehälle är NOK 800 per dygn. Resekostnader kalkyleras enligt billigaste resesättet, normalt med tåg/färga eller APEX.

CHECKLISTA: Följande bilagor skall vara numrerade och är obligatoriska vid en kursansökan: 1. Kursprogram / presentation av kursen. 2. Bekräftelse ifrån kursarrangören att den sökande har beviljats plats på kursen. 3. Bekräftelse ifrån handledare att kursen är godkänd som ett led i forskarutbildningen i hemlandet. 4. Curriculum Vitae (merit-förteckning) och publikationslista för den sökande.

Kalender 1999

(arrangementer annonceret i MEDDELELSER)

The Seventh European Course in Advanced Statistics:

ENVIRONMENTAL STATISTICS.

September 6-10, 1999.

Garpenberg, County of Dalarna, Sweden.

Organised by the Swedish Statistical Association and Sponsored by the European Commission.

A total of approximately 25 lectures will be devoted to the following topics:

Stochastic modelling vs. deterministic reductionism in environmental science. Main speaker: Peter Young (UK).

Sensitivity analysis of environmental models. Main speaker: Andrea Saltelli (Italy).

Spatial statistics and applications in environmental science. Main speaker: Noel Cressie (USA).

Extreme value theory and applications in environmental science. Main speaker: Ross Leadbetter (USA).

Scientific committee: B. Fichet (L'Université de Provence, Aix-Marseille II), A. Grimval (Linköping University, Chairman), H. Nyquist (Umeå University), D. Pena (Universidad Carlos III de Madrid) and P. Young (Lancaster University).

Course participants should have a solid background in statistics, although not necessarily in the specific areas covered by the lectures. Young scientists at or close to the level of a Ph.D. are particularly welcome. To promote informal discussions, the number of participants is limited to 70.

Fee for students: 800 SEK. Fee for university employees: 2000 SEK. Fee for other participants: 4000 SEK.

Deadline for application to attend: April 15, 1999.

The course will be held at Garpenberg Manor House with traditions dating back to the 16th century. The main house hosts a number of beautiful conference and recreational rooms. Surrounding areas are ideal for a variety of outdoor activities. Garpenberg is located about 160 km from Stockholm International Airport (Arlanda).

Further information and an application form can be found at the web-site: <http://www.mai.liu.se/Stat/ecas99.html>

Dato	Med. nr.	Aktivitet
8/4	2/99	Seminar. Anders la Cour-Harboo: Matematik og digital signalbehandling. (Aalborg)
8/4	2/99	Seminar. Jens Ledet Jensen: Probabilistic models of DNA sequence evolution with context dependent rates of substitution. (ATS-AU)
7-9/4	1/99	Norsk statistisk forenings etterutdanningsseminar. Http://www.mi.uib.no/~lunde/sfb/etter99.html
14/4	3/99	½-dagsmode. Regression Models. (DSTS/DES)
14/4	3/99	Seminar. Steffen Lauritzen: On the estimation of structure. (ATS-AU)
15/4	2/99	Seminar. Jesper Møller: Perfect Metropolis-Hastings simulation of locally stable point processes. (Aalborg)
22-24/4	2/99	MaPhySto Workshop. Inverse Problems in stratified media. (Århus) Http://www.maphysto.dk/events/invprobw99/ (reg senest 15/3)
29/4	3/99	Seminar. Terry Therneau: Penalized survival models, frailty, and practicality or I have this nice new hammer – is there a nail in sight? (BIOSTAT-KU)
4-5/5	3/99	Todagesmode (STAT-DEM-OU)
5-7/5	2/99	MaPhySto Workshop. Turbulence and finance. (Århus) Http://www.maphysto.dk/events/turbulence99/ (reg senest 18/3)
10/5	3/99	Seminar. Philip Hougaard: Analysis of multivariate survival data by marginal modeling. (BIOSTAT-KU)
17/5	3/99	Seminar. David Matthews: Statistical quality control of HIV-1 ELISA testing. (BIOSTAT-KU)
27/5	3/99	Seminar. Ernst Hansen: Geometric ergodicity of metropolis algorithms. (ATS-AU)
7-11/6	10/98	11 th SCIA. (Kagerlussuaq, Greenland) Http://www.diku.dk/scia99
9-11/6	2/99	IBS. Nordic Regional Conference. NOVO, Bagsværd. Http://www.jbs.agrsci.dk/Biometry/NordicRegionIBS/nrc99.html
14-19/6	9/98	Nordisk Sommarskola i Sannolikhetssteori.
28-30/7	3/99	Conference: Statistical issues in Biopharmaceutical environments. Towards the new millennium.
9-20/8	8/98	Summer School. Empirical Processes. (MaPhySto, ATS-AU)
6-10/9	3/99	The 7 th European Course in advanced statistics: Environmental statistics. Deadline 15.4.99.
14-18/9	8/98	Second European conference on highly structures stochastic systems.
4-8/10	3/99	NORFA Course. Survival and event history analysis. Deadline 5.5.99

Kalender 2000

(arrangementer annonceret i MEDDELELSER)

17-22/1 2000	3/99	MaPhySto workshop on Computational Stochastics. (Århus) Http://www.maphysto.dk/events/compstoc2000. (Reg senest 1.10.99)
5-8/6 2000	1/99	18 th Nordic Conference in Mathematical Statistics, 2000. Http://www.math.uio.no/~nordstat/

Medlemsnyt

- Bendix Carstensen er per 1. april ansat ved Steno Diabetes Center.
- Asger Roer Pedersen er per 15. marts ansat som lektor ved Institut for Biostatistik, Aarhus Universitet.

Deadlines i 1999

Frist for indlevering af bidrag:
23. april
25. maj

MEDDELELSER udkommer
3. maj
1. juni

S-PLUS

Seminar

Statistisk dataanalyse med programmet S-PLUS

Du inviteres hermed til et seminar, hvor du vil opleve statistikprogrammet S-PLUS's store styrke både som stand-alone-program – men også i sammenhæng med andre statistik-programmer, hvor S-PLUS er en solid og integreret overbygning.

Seminarholder

David Smith, MathSoft Inc.

Agenda

9.00	Velkomst og introduktion af ENGBERG a/s samt S-PLUS.
9.30	Præsentation af S-PLUS 4.5 for Windows - live demo herunder <ul style="list-style-type: none">• Data import og export• Basic og avancerede grafiske faciliteter• Basic og avancerede statistiske modeller• Objekt management• S-PLUS versus SAS - S-PLUS som supplement til SAS
10.10	Pause
10.25	Hvordan bruges S-PLUS i dag i den farmaceutiske industri? Case med demo
11.00	Spørgerunde
11.30	Slut

Vores kunder omfatter bl.a.:

- Hospitaler
- Universiteter og højere læreanstalter
- Telefoni
- Pensions-selskaber
- Pengeinstitutter
- Produktionsvirksomheder
- Medicinalvirksomheder
- Naturvidenskabelig forskning
- Statslig forskning

Seminarholdes

Hillerød, den 20. april kl. 9.00 - 11.30
Århus, den 21. april kl. 9.00 - 11.30

Seminarer er naturligvis gratis.
Tilmelding er dog bindende.

Tilmelding

Ring til mig for tilmelding på 48 25 17 77, eller fax denne side retur på 48 24 08 47, når du har afkrydset skemaet.

Jeg glæder mig til at møde dig.

Med venlig hilsen
ENGBERG a/s

Anna Pelvig
Anna Pelvig

Kryds venligst af og fax retur på 48 24 08 47

☐ Ja tak, jeg vil gerne deltage i seminarer.
Følgende kollegaer vil også gerne deltage:

Jeg anvender idag statistikprogrammet

På seminarer vil jeg vil gerne høre mere om...

Navn _____

Firma _____

Afd. _____

Adresse _____

Postnr/By _____

Telefon _____

E-mail _____

Ndr. Jernbanevej 13C - 3400 Hillerød
Tlf. 48 25 17 77 - Fax 48 24 08 47 - www.engberg.dk

ENGBERG a/s