

**Wiener Biometrische Sektion  
der Internationalen Biometrischen Gesellschaft  
Region Österreich – Schweiz**

<http://www.meduniwien.ac.at/wbs/>

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Einladung zum  
**Biometrischen Kolloquium**

am Mittwoch, den 8. September 2010 um 14:00 Uhr (s.t.)

in der Informatikbibliothek (Ebene 3, Raum 88.03.806) des  
Zentrums für Medizinische Statistik, Informatik und Intelligente  
Systeme der Medizinischen Universität Wien  
Spitalgasse 23, 1090 Wien

Vortragender:

**Prof. Terry Therneau, PhD**  
Division of Biomedical Statistics and  
Informatics at Mayo Clinic, Rochester, USA

**Practical Mixed-Effects Survival Models**

Der Vortrag wird auf Englisch gehalten. Wir freuen uns auf  
zahlreichen Besuch.

Georg Heinze  
Präsident

Martin Posch  
Sekretär

## **Practical Mixed-Effects Survival Models**

Terry Therneau

Division of Biomedical Statistics and Informatics at Mayo Clinic  
Rochester, USA

Although theory papers dominate our journals and promotion, reliable practical computing tools drive statistical practice.

Reliable: They work (no program faults, convergence failure, etc)

Practical: Integrated into a standard statistical system

Cover a sufficient variety of cases

Good output and documentation

Theory: Citable theory for the results

Useful: They give additional insight in the analysis of real data, over and above older methods.

Survival models with random effects, also known as frailty models, have been a subject of much theoretical work over the past 20 years. Software that satisfies the above definition has just begun to emerge, however, i.e., the **coxme** package for R. This talk will focus on the last point above, using examples from clinical trials, familial genetics, and microarrays (gene sets) where a mixed effects model reveals additional structure in the data.