

Michael Schemper

1952 born in Vienna, Austria

1972 - 1977 studied *Statistics* at Vienna University (MSc 1976, PhD 1977)

1977 - 1991 founded and headed a *Unit for Biostatistics and Documentation* at the former *1st Dept. of Surgery* of Vienna University

1985 Habilitation (Assoc. Prof.) for Medical Statistics and Documentation at Vienna University.

1987/88 Visiting Associate Professor at the *Dept. of Biomathematics (MDACC)* of the University of Texas in Houston, USA.

Since 1991 Professor of Clinical Biostatistics. Founded, and headed until 2015, the *Section for Clinical Biometrics* at the *Department of Medical Computer Sciences* of the University of Vienna (since 2010 *Center for Medical Statistics, Informatics and Intelligent Systems, CeMSIIS*, of the Medical University of Vienna)

Between 1992 and 2015 often additionally chaired the larger organizational unit such as *CeMSIIS* to which the *Section for Clinical Biometrics* had belonged.

Professional functions:

1988 - 1990 President of the *Vienna Biometric Section*

1982 - 1985 and again 2006 - 2009 Council Member of the *International Biometric Society (IBS)*

1994 - 1999 Member of the Editorial Advisory Committee for *Biometrics*

1996 - 1997 President of the Austro-Swiss Region (ROeS) of the IBS

1997 - 2000 Member of the Executive Committee of the *International Society for Clinical Biostatistics (ISCB)*

2000 - 2015 Member of the Ethics Committee of the Medical University of Vienna

2006 - 2013 Associate Editor of *Statistics in Medicine*

2013 - 2014 Member of the Executive Board of the IBS

Chairman for the scientific program committees for the international conferences ISCB-17 in Budapest, 1996, ISCB-26 in Szeged, Hungary, 2005, and for the ROeS - Seminar in Vienna, 1997

Chairman of the local organizing committee for the international conference ISCB-35 in Vienna, 2014

Honorary Lifetime Membership of ISCB received 2016

Selected methodological papers (1984-2021) in descending chronologic order

Number of citations according to [Google Scholar](#) for highly cited papers as of Jan 17th, 2022:
50-199, 200-999, 1000-1999

Gleiss, A., Henderson, R., Schemper, M.

Degrees of necessity and of sufficiency: Further results and extensions, with an application to covid-19 mortality in Austria
(2021) *Statistics in Medicine*, 40 (14), pp. 3352-3366. (Open Access)

Gleiss, A., Schemper, M.

Quantifying degrees of necessity and of sufficiency in cause-effect relationships with dichotomous and survival outcomes
(2019) *Statistics in Medicine*, 38 (23), pp. 4733-4748. (Open Access)

Gleiss, A., Gnant, M., Schemper, M.

Explained variation in shared frailty models
(2018) *Statistics in Medicine*, 37 (9), pp. 1482-1490.

Gleiss, A., Zeillinger, R., Braicu, E.I., Trillsch, F., Vergote, I., Schemper, M.

Statistical controversies in clinical research: The importance of importance
(2016) *Annals of Oncology*, 27 (7), art. no. mdw159, pp. 1185-1189. (Open Access)

Wakounig, S., Heinze, G., Schemper, M.

Non-parametric estimation of relative risk in survival and associated tests
(2015) *Statistical Methods in Medical Research*, 24 (6), pp. 856-870.

Gleiss, A., Lassi, M., Blümel, P., Borkenstein, M., Kapelari, K., Mayer, M., Schemper, M., Häusler, G.

Austrian height and body proportion references for children aged 4 to under 19 years
(2013) *Annals of Human Biology*, 40 (4), pp. 324-332.

Schemper, M., Kaider, A., Wakounig, S., Heinze, G.

Estimating the correlation of bivariate failure times under censoring
(2013) *Statistics in Medicine*, 32 (27), pp. 4781-4790.

Steyerberg, E., Schemper, M., Harrell, F.

Logistic regression modeling and the number of events per variable: selection bias dominates
(2011) *Journal of Clinical Epidemiology*, 64 (12), pp. 1464-1465. Cited 52 times.

Dunkler, D., Schemper, M., Heinze, G.

Gene selection in microarray survival studies under possibly non-proportional hazards
(2010) *Bioinformatics*, 26 (6), art. no. btq035, pp. 784-790.

Schemper, M., Wakounig, S., Heinze, G.

The estimation of average hazard ratios by weighted Cox regression
(2009) *Statistics in Medicine*, 28 (19), pp. 2473-2489. Cited 209 times.

Lehr, S., Schemper, M.

Parsimonious analysis of time-dependent effects in the Cox model
(2007) *Statistics in Medicine*, 26 (13), pp. 2686-2698.

Dunkler, D., Michiels, S., Schemper, M.
Gene expression profiling: Does it add predictive accuracy to clinical characteristics in cancer prognosis?
(2007) *European Journal of Cancer*, 43 (4), pp. 745-751. Cited 107 times.

Nardi, A., Schemper, M.
Comparing Cox and parametric models in clinical studies
(2003) *Statistics in Medicine*, 22 (23), pp. 3597-3610. Cited 166 times.

Heinze, G., Gnant, M., Schemper, M.
Exact Log-Rank Tests for Unequal Follow-Up
(2003) *Biometrics*, 59 (4), pp. 1151-1157. Cited 61 times.

Schemper, M.
Predictive accuracy and explained variation
(2003) *Statistics in Medicine*, 22 (14), pp. 2299-2308. Cited 148 times.

Heinze, G., Schemper, M.
Comparing the importance of prognostic factors in Cox and logistic regression using SAS
(2003) *Computer Methods and Programs in Biomedicine*, 71 (2), pp. 155-163.

Heinze, G., Schemper, M.
A solution to the problem of separation in logistic regression
(2002) *Statistics in Medicine*, 21 (16), pp. 2409-2419. Cited 1758 times.

Heinze, G., Schemper, M.
A solution to the problem of monotone likelihood in Cox regression
(2001) *Biometrics*, 57 (1), pp. 114-119. Cited 281 times.

Schemper, M., Henderson, R.
Predictive accuracy and explained variation in Cox regression
(2000) *Biometrics*, 56 (1), pp. 249-255. Cited 248 times.

Nardi, A., Schemper, M.
New residuals for Cox regression and their application to outlier screening
(1999) *Biometrics*, 55 (2), pp. 523-529. Cited 75 times.

Schemper, M., Kaider, A.
A new approach to estimate correlation coefficients in the presence of censoring and proportional hazards
(1997) *Computational Statistics and Data Analysis*, 23 (4), pp. 467-476.

Schemper, M., Heinze, G.
Probability imputation revisited for prognostic factor studies
(1997) *Statistics in Medicine*, 16 (1-3), pp. 73-80.

Mittlböck, M., Schemper, M.
Explained variation for logistic regression
(1996) *Statistics in Medicine*, 15 (19), pp. 1987-1997. Cited 393 times.

Schemper, M., Stare, J.
Explained variation in survival analysis
(1996) *Statistics in Medicine*, 15 (19), pp. 1999-2012. Cited 245 times.

Schemper, M., Smith, T.L.

**A note on quantifying follow-up in studies of failure time
(1996) *Controlled Clinical Trials*, 17 (4), pp. 343-346. Cited 1926 times.**

Schemper, M.

The relative importance of prognostic factors in studies of survival
(1993) *Statistics in Medicine*, 12 (24), pp. 2377-2382. Cited 116 times.

Schemper, M.

Further results on the explained variation in proportional hazards regression
(1992) *Biometrika*, 79 (1), pp. 202-204.

Schemper, M.

Cox analysis of survival data with nonproportional hazard functions (1992) *Journal of the Royal Statistical Society: Series D (The Statistician)*, 41(4), pp. 455-465. Cited 184 times.

Schemper, M.

Generalized Rank Transformations for Tests of Survival
(1991) *Biometrical Journal*, 33 (1), pp. 73-79.

Schemper, M.

Simple Nonparametric Inference for Monotonic Processes
(1991) *Biometrical Journal*, 33 (4), pp. 387-392.

Schemper, M.

The explained variation in proportional hazards regression
(1990) *Biometrika*, 77 (1), pp. 216-218. Cited 119 times.

Schemper, M., Smith, T.L.

Efficient evaluation of treatment effects in the presence of missing covariate values
(1990) *Statistics in Medicine*, 9 (7), pp. 777-784. Cited 71 times.

Schemper, M.

A Closed-form Jackknife Solution for the Behrens-Fisher Problem
(1989) *Biometrical Journal*, 31 (8), pp. 931-939.

Schemper, M.

Non-parametric analysis of treatment—covariate interaction in the presence of censoring
(1988) *Statistics in Medicine*, 7 (12), pp. 1257-1266.

Schemper, M.

One- and Two-Sample Tests of Kendall's τ
(1987) *Biometrical Journal*, 29 (8), pp. 1003-1009.

Schemper, M.

Nonparametric estimation of variance, skewness and kurtosis of the distribution of a statistic by jackknife and bootstrap techniques
(1987) *Statistica Neerlandica*, 41 (1), pp. 59-64.

Schemper, M.

General Derivation of Intraclass Correlation Coefficients
(1986) *Biometrical Journal*, 28 (4), pp. 485-489.

Schemper, M.

A generalized Friedman test for data defined by intervals
(1984) *Biometrical Journal*, 26 (3), pp. 305-308.

Schemper, M.

A Generalization of the Intraclass Tau Correlation for Tied and Censored Data
(1984) *Biometrical Journal*, 26 (6), pp. 609-617

Schemper, M.

Exact Test Procedures for Generalized Kendall Correlation Coefficients
(1984) *Biometrical Journal*, 26 (4), pp. 399-406.