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 Memberships of ISCB and of ROeS

Selected methodological papers (1984-2024) in descending chronologic order

Number of citations according to *Google Scholar* for highly cited papers as of Jan 31st, 2026:
50-199, 200-999, **1000-3000**

Gleiss, A., Gnant, M., Schemper, M.
Explained variation and degrees of necessity and of sufficiency for competing risks survival data
(2024) Biometrical Journal, 66 (2), 2300140 (pp. 1-17; Open Access)

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.

Dunkler, D., Ploner, M., Schemper, M., & Heinze, G.
Weighted Cox Regression Using the R Package coxphw.
(2018) Journal of Statistical Software, 84(2), pp. 1–26. Cited 163 times.

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), 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. Cited 65 times.

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. Cited 69 times.

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 67 times.

Dunkler, D., Schemper, M., Heinze, G.
Gene selection in microarray survival studies under possibly non-proportional hazards
(2010) Bioinformatics, 26 (6), 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 373 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 114 times.

Nardi, A., Schemper, M.
Comparing Cox and parametric models in clinical studies
(2003) Statistics in Medicine, 22 (23), pp. 3597-3610. Cited 215 times.

Heinze, G., Gnant, M., Schemper, M.
Exact Log-Rank Tests for Unequal Follow-Up
(2003) Biometrics, 59 (4), pp. 1151-1157. Cited 69 times.

Schemper, M.
Predictive accuracy and explained variation
(2003) Statistics in Medicine, 22 (14), pp. 2299-2308. Cited 176 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. Cited 57 times.

Heinze, G., Schemper, M.
A solution to the problem of separation in logistic regression
(2002) Statistics in Medicine, 21 (16), pp. 2409-2419. Cited 2640 times

Mittlböck, M., Schemper, M.
Explained variation for logistic regression–small sample adjustments, confidence intervals and predictive precision
(2002) Biometrical Journal, 44 (3), pp. 263-272.

Heinze, G., Schemper, M.
A solution to the problem of monotone likelihood in Cox regression
(2001) Biometrics, 57 (1), pp. 114-119. Cited 440 times.

Schemper, M., Henderson, R.
Predictive accuracy and explained variation in Cox regression
(2000) Biometrics, 56 (1), pp. 249-255. Cited 280 times.

Nardi, A., Schemper, M.
New residuals for Cox regression and their application to outlier screening
(1999) Biometrics, 55 (2), pp. 523-529. Cited 90 times.

Mittlböck, M., Schemper, M.
Computing measures of explained variation for logistic regression models
(1999) Computer Methods and Programs in Biomedicine, 58 (1), pp. 17-24.

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 473 times.

Schemper, M., Stare, J.
Explained variation in survival analysis
(1996) Statistics in Medicine, 15 (19), pp. 1999-2012. Cited 268 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 2726 times.

Schemper, M.
The relative importance of prognostic factors in studies of survival
(1993) Statistics in Medicine, 12 (24), pp. 2377-2382. Cited 119 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 262 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 126 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 76 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.