

MCP2007 – 5th International Conference on Multiple Comparison Procedures

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An internet search for “Bonferroni Correction” (and synonyms) jumps easily the hurdle of one million hits. It will be impossible for future researchers to top the popularity of Carlo Emilio Bonferroni in the field of multiple comparisons procedures. However, new statistical approaches to address the multiplicity issue in statistical reasoning are receiving continuous and increasing attention in very diverse fields of application. At the 5th International Conference on Multiple Comparison Procedures (MCP 2007) held in Vienna, Austria 9–11 July 2007 more than 250 scientists from academia, regulatory authorities and industry coming from over 25 countries met to exchange new ideas on the theory and application of multiple comparison procedures. On the opening day, the occasion of his 65th birthday, Professor Peter Bauer gave the keynote address “Multiple Inference in Medical Research – an Experience”. It revealed, for the first time to most participants, fascinating early history of multiple comparison research in central Europe, including such characters as Sture Holm, Eckart Sonnemann, Peter Bauer, Gerhard Hommel, and Willi Maurer.



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Earlier 2007 marked the passing of Charles Dunnett and Eckart Sonnemann. During the opening session, Helmut Finner and Ajit Tamhane paid tributes to these two influential persons in multiple comparisons. Their written tributes appear in this issue.

Dunnett (1955) introduced the concept of multiple comparisons with a control. Evidence of his contribution can be seen by the fact that four of the articles in this special issue (by *Friede and Stallard*, *Schaarschmidt, Sill, and Hothorn*, *Hasler and Hothorn*, and *Lin et al.* as well as in the special issue of MCP 2005 (Imada and Douke, 2007; Nakamura and Douke, 2007; Finner and Strassburger, 2007; Penello, 2007) deal with multiple comparisons with a control.

Outside of central Europe, most multiple testers (especially those who do not speak German) had not been aware of the extent of the contribution by Eckart Sonnemann to multiple testing. We are grateful to Helmut Finner for the English translation of Eckart Sonnemann's (1982) seminal paper "Allgemeine Lösungen multipler Testprobleme" (General Solutions to Multiple Testing Problems) which is published in this issue. Reading this article, one can understand Sonnemann's influence on a whole generation of statisticians in Austria, Germany and Switzerland. This article not only gave a precise description of closed testing, but connects with ranking and selection as well. In this special issue, five of the articles (by *Hommel and Bretz*, *Dmitrienko, Tamhane, and Wiens*, *Guilbaud, Logan and Tamhane*, *Li and Mehrotra*) deal with closed testing, while four of the articles (by *Shaffer*, *Wu, Wang, and Annis*, *Cui and Wilson*, *Lin and Hayter*) deal with ranking and selection.

Dudoit, Gilbert, and van der Laan give a detailed treatment of resampling based empirical Bayes procedures. The necessary distributional assumptions for resampling based multiple testing, an important topic in applications as, e.g., bioinformatics, is investigated in the papers by *Westfall and Troendle* as well as *Calian, Li, and Hsu*. Two papers (*Antunes and Sousa*, and *Gould*) deal with Bayesian methods.

We were impressed by the high number and quality of submissions for this special issue. Special thanks to the Editors Edgar Brunner and Martin Schumacher who could convince the publisher to double the page limit for this issue of *Biometrical Journal*. We wish to thank all reviewers and the editorial assistants Zsuzsanna Egyedne Aranyi in Vienna and Margarita Neff-Heinrich, Karola Riemenschneider and Nicole Vana in Göttingen for their support for this special issue. It continues the tradition of the past MCP conferences (Tel Aviv 1996, Berlin 2000, Bethesda 2002, Shanghai 2005) which resulted in special issues with selected papers from the meetings (Benjamini, Hothorn and Sen, 1999, Bauer, Hothorn and Westfall, 2001, Westfall and Tamhane, 2003, Bretz, Chen, and Hsu, 2007).

Finally, apart from the scientific program of the MCP 2007 in Vienna, we do not want to conceal the social and tourist attractions of the conference, the walking tour to beautiful gardens and palaces, the reception in the City Hall, the conference dinner at a Wiener Heurigen ("new wine" tavern) and a concert of the opera "La Finta Semplice", which Mozart composed at age 13. Clearly, there is connection from the past, through the present, to the future, by the MCP 2007 event, as well as articles in this issue. MCP 2009 will take place in Tokyo, Japan, on 24–27 March 2009 (see www.mcp-conference.org). We look forward to connecting with readers of this issue there, to continue our memorable story of multiple comparisons.

Martin Posch, Franz Koenig, and Jason C. Hsu
Guest Editors

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