Mathematical Statistics: Essays on History and Methodology. Comments by Lutz Mattner (Trier):

Page 5_{15} The list of mathematically advanced textbooks that do not mention the result of Landers and Rogge (1972) on the existence of a critical function most powerful at a given alternative without assuming dominatedness of the hypothesis could be enlarged to include Lehmann and Romano (2005) and—Pfanzagl (1994). On the other hand, Rüschendorf (2014) proves the existence.

Unlike stated, Landers and Rogge (1972) do not prove sequential weak compactness of the set of all critical functions.

Lehmann's proof of sequential weak compactness is not independent of Banach's: Lehmann (1959) cites Banach (1932). **References:**

Pfanzagl, J. (1994). *Parametric Statistical Theory*, Berlin: De Gruyter.

Rüschendorf, L. (2014). *Mathematische Statistik*, Springer Spektrum.

Page 6_3 To the list of "outstanding mathematicians who showed some interest in statistics", one might add Dynkin.

Page 8^{10} Brown (1964) should be Brown (1994). **Reference:**

Brown, L.D. (1994). Minimaxity, more or less. *Statistical Decision Theory and Related Topics, V, 118*, New York: Springer.

Page 115_3 A counterexample to the statement that "generalizations to strong consistency, perhaps locally uniform, and to multi-parameter families are straightforward" is—Pfanzagl's (1994) treatment; it does not prove uniform consistency in the case of Bernoulli distributions with the full parameter space $[0, 1]$, although an appropriate modification of the theory does.

Page 229, (513.16) Inequality (5.13.16) was finally extended to multidimensional marginals, with arbitrary centrally convex sets in the role of the $[-t_i, t_i]$, by Royen (2014). **Reference:**

Royen, T. (2014). A simple proof of the Gaussian correlation conjecture extended to some multivariate gamma distributions. *Far East J. Theor. Stat., 48, 139–145.*