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[S] Supplemental material is available online at <http://molpharm.aspetjournals.org>.

*About the cover:* Top, view of CMPDA (magenta stick) looking from the top down the 2-fold axis of symmetry showing the relationship of CMPDA, a positive allosteric modulator of AMPA receptors, to the hinge regions of HS1S2H. Bottom, omit electron density map of bis-alkylsulfonamide 506091 (CMPDA). See article by Timm et al. on page 267 of this issue. (Adapted from Figs. 1a and 3a.)