
Symposium WA-2
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Symposium on The Comparative Genetics of Aggression: Focus on MAOA and Serotonin

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Recently, there have been several proposals for comparative genetic approaches to the study of brain and behavior. (Pennish, E. (2005) A genomic view of animal behavior. *Science*. 307: 30-32. Robinson, G. E., Grozingber, C. M., and Whitfield, C. W. (2005) Sociogenomics: Social life in molecular terms. *Nature Reviews Genetics*. 6: 257-270). These consider similar behavioral effects of identical genes across species. For example, the forager gene has a role in the search for food in round worms, fruit flies, and honeybees, and the period gene has a role in the circadian clock of fruit flies, honeybees, mice and humans. There should also be a comparative genetic approach to the study of aggression. In this context, this symposium has presentations on the roles in aggression of genes for monoamine oxidase in mice (Chen and Shih), monkeys (Higley and Newman) and humans (Prom et al.) and the serotonin transporter in mice (Holmes) and monkeys (Higley and Newman). These genetic variants are relevant to investigating the role of serotonin in aggression in each species as well as across species. This is also an example of a comparative genetics of aggression that can uncover similarities and differences in brain mechanisms of aggression across species and provide a substantial foundation for “animal models” of human aggression.

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