

FENS Forum 2006

For lectures, symposia and workshops, time indicates the beginning of the session.
For posters, authors are expected to be in attendance at their posters at the time indicated.



First author: Berry, Alessandra (poster)

Poster board 392 - Sun 09/07, 16:00 - Hall Y
Session 055 - Learning and memory: animals II
Abstract A055.4, published in *FENS Forum Abstracts*, vol. 3, 2006.
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Title	Behavioural characterisation of a mutant mouse strain showing resistance to oxidative stress.
Text	<p>Targeted mutation of the p66shc gene in a 129 Sv/Ev mouse strain has been shown to increase both resistance to oxidative stress and life span. In order to characterise the above-mentioned mutation from a behavioural point of view, we compared the phenotype of p66Shc^{-/-} (ko) to that of p66Shc^{+/+} wild type (wt) controls in a battery of behavioural tests at three different ages (4, 11 and 24-months). Results from the present study indicate that age-dependent differences, apparent in wt animals, were less pronounced in the ko phenotype, particularly in the open field and in the hot plate tests which revealed an increase in pain threshold. Overall data from the plus maze give an indication of ko mice being characterised by a less emotional phenotype. When tested in the Morris water maze, a spatial navigation task, ko young subjects were superior in their ability to learn the task. Studies aimed at correlating the behavioural phenotype of these mice with selected changes in neurochemical parameters are currently in progress. In addition, we are investigating the effects of stimuli causing oxidative stress at the CNS level on the behavioural phenotype.</p> <p>Support contributed by: Italian Ministry of Health (grant on Neurodegenerative Diseases (ex art. 56) to F. C. and L. M.). A. Berry is currently a recipient of a Marie Curie fellowship (The Genetic Basis of Disease; Stress-Responsive Genes in Brain During Health and Disease).</p>
Theme	Cognition and behaviour Animal cognition and behaviour / Emotional learning & memory systems and modulation of memory

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