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Meet Our Editorial Board Member

Dr. Stephen C. Bondy

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Stephen Bondy is a Professor of Neuroscience in the Center for Occupational and Environmental Health, University of California, Irvine. The focus of his research concerns the mechanistic processes underlying the effect of environmental or nutritional agents in altering the rate of brain aging. He obtained an M.A. from Cambridge University and a Ph.D. in Biochemistry from the University of Birmingham, UK. He has held positions at Columbia University, UCLA, University of Colorado, and the National Institute for Environmental Health Sciences. He is the author of around 300 articles and reviews. His earlier work included contributions to the relation between sensory input and brain energy metabolism, the factors influencing neurotransmitter receptor density, and the role of free radicals in neurotoxic damage.



Stephen C. Bondy

The major unifying concept underlying all of his current studies is that the aging brain is intrinsically subject to gradually increasing levels of inflammation unprovoked by exogenous immune stimuli. This innate effect can be worsened by specific environmental factors or ameliorated by appropriate nutritional supplementation. The application of low levels of aluminum in drinking water is used to exemplify accelerated brain aging, while the use of dietary melatonin is used as a model for retardation of neurosenescence. Since brain aging is an essential contributing factor to neurodegenerative disorders such as Alzheimer's and Parkinson's diseases, it is postulated that remedial action to reduce age-related excessive neuroinflammation, is likely to the onset of brain aging and hence also to reduce the incidence of age-linked neurological disease.

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