

Anthony Smith Ph.D.



Anthony's work is having a significant impact in the research community by helping to elucidate the role of R-lipoic acid in maintaining human health and reducing the loss of function associated with age-related disease. Anthony is a leading international authority on aging, lipoic acid and vascular disease. Anthony earned his Ph.D. and did his post-doctoral work at the Linus Pauling Institute studying the molecular mechanisms of cardiovascular aging and the therapeutic potential of R-lipoic acid. Anthony is a private contractor, consultant and technical advisor to the nutraceutical industry. He oversees the GeroNova quality control and assurance (QC/QA) programs and has trained the GeroNova lab technicians in QA/QC methods and Good Laboratory Practices (GLP). Dr. Smith is a member of Sigma Xi, the Biochemical Society and the American Heart Association.

Publications & Writings in Process:

Smith AR, Visioli F, Frei B, Hagen TM. Lipoic acid significantly restores, in rats, the age-related decline in vasomotion. *Br J Pharmacol*. 2008 Apr;153(8):1615-22.

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Smith, AR, Visioli F, Frei B, Hagen TM. Age-related changes in endothelial nitric oxide synthase phosphorylation and nitric oxide dependent vasodilation: evidence for a novel mechanism involving sphingomyelinase and ceramide-activated phosphatase 2A. *Aging Cell* 5, 391-400 (2006).

Smith AR, Visioli F, Hagen TM. Plasma membrane-associated endothelial nitric oxide synthase and activity in aging rat aortic vascular endothelia markedly decline with age. *Arch Biochem Biophys* 454, 100-5 (2006).

Smith AR; (2005) Elevated ceramide levels contribute to the age-associated decline in vascular endothelial nitric oxide. Pharmacological administration of (R)-lipoic acid partially restores function. Ph.D. Thesis. Oregon State University.

Smith AR, Shenvi SV, Widlansky M, Suh JH & Hagen TM. Lipoic acid as a potential therapy for chronic diseases associated with oxidative stress. *Curr Med Chem* 11, 1135-46 (2004)

Smith, A.R. & Hagen, T.M. Vascular endothelial dysfunction in aging: loss of Akt-dependent endothelial nitric oxide synthase phosphorylation and partial restoration by (R)-alpha-lipoic acid. *Biochem Soc Trans* 31, 1447-9. (2003)

Smith AR, Visioli, F & Hagen TM. Vitamin C matters: increased oxidative stress in cultured human aortic endothelial cells without supplemental ascorbic acid. *FASEB J* 16, 1102-4. (2002)

Carlson DA, Smith AR, Ulrich H. The case against controlled release lipoic acid: a pharmacokinetic-mechanistic based argument.

http://www.geronova.com/included/docs/controlled_release_lipoicacid.pdf